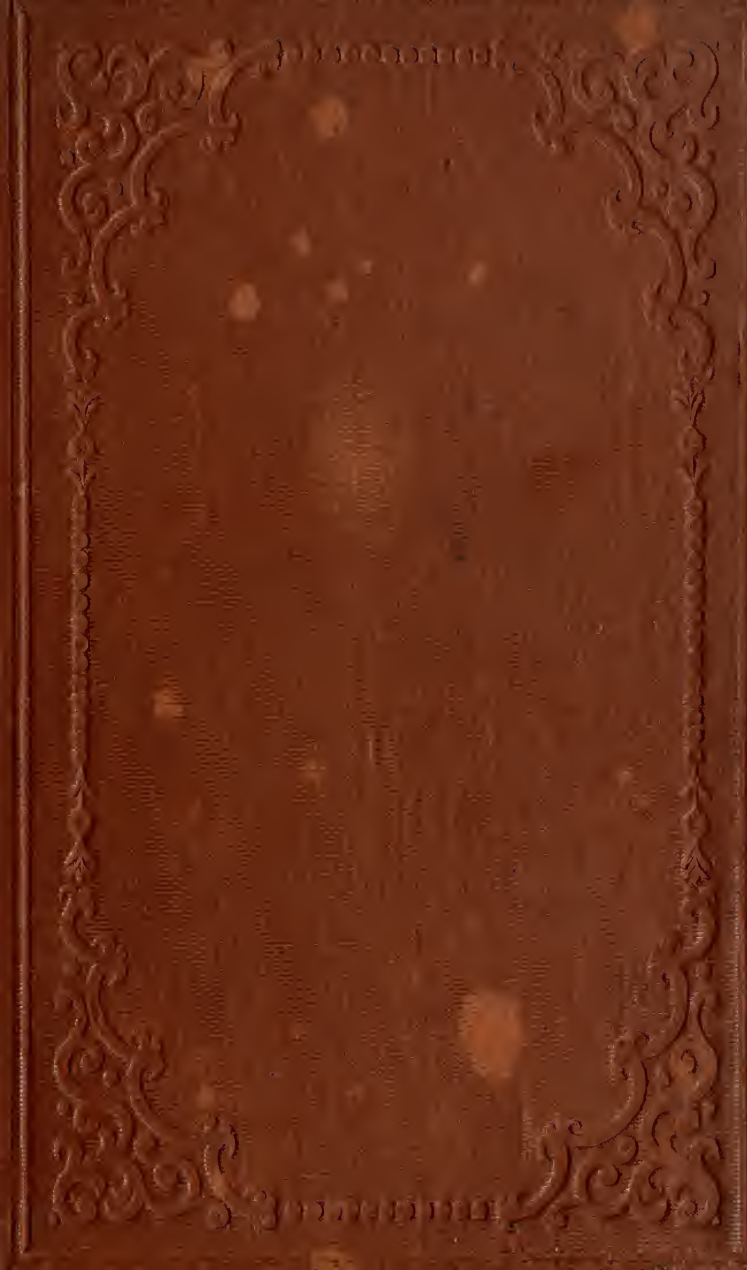




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CELTIC STUDIES:

FROM THE GERMAN OF

DR. HERMANN EBEL,

WITH AN

INTRODUCTION

ON ROOTS, STEMS, AND DERIVATIVES, AND ON CASE-ENDINGS OF NOUNS IN THE
INDO-EUROPEAN LANGUAGES.

BY

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P R E F A C E .

THE history of the variation of opinion about the Celtic languages would make a curious and instructive chapter of literary history. Their relationships with other languages, like those of the peoples who spoke them with other branches of the human race, depended rather upon the dictates of passion than of reason. There was indeed but little room in most cases for the exercise of the reason, because those who theorized about the Celtic languages were generally wholly ignorant of them, or, at least, knew them very imperfectly, and in their most modern and corrupt forms. The rudest tongue is dear to those whose first thoughts were expressed in it. The pride which the Irish or Welsh take in their language is legitimate, and the exaggerated estimate which they may sometimes form of the beauties and powers of their respective dialects can readily be pardoned. But the same indulgence cannot be extended to writers who contribute to bring science into discredit, and contempt upon the language and literature of a people, and therefore upon the people themselves, by fanciful and baseless speculations. It matters not whether, like Vallancey's, these speculations tended to exalt the Celtic language, or, like Pinkerton's, to degrade it: both are injurious to the growth of true learning. Indeed, the former are the worse, because passages like the following, written by Mr. Pinkerton, could only degrade the author: "The mythology of the Celtæ (which is yet to be discovered!) resembled in all probability that of the Hottentots or others, the rudest savages, as the Celtæ anciently were, and are little better at present, being incapable of any progress in society". I have called up the literary shade of Pinkerton from the oblivion into which he has sunk, not because these old opinions are now of

much consequence of themselves, but because they show one of the extremes of opinion once held regarding the affinities of the Celtic language. This kind of literature now very rarely disgraces comparative philology, but, as may be expected in a subject like ethnology, which, as yet, scarcely deserves the name of a science, and in which mere assertion too frequently usurps the place of inductive hypotheses, it still constitutes, if not an important, at least a very popular element.

There is scarcely a language in the world between which and the Celtic some one has not attempted to prove a connection; or, to speak more precisely, its chief existing dialect, the Irish. The disciples of the Pinkerton school were, of course, desirous that its affinities should be with the languages of the inferior races, and accordingly one found a great similarity between it and the tongue of the Jallofs, on the coast of Africa; another found that it was a distant cousin of that of the Leni Lenappe, a great family of American Indians, who formerly possessed the region of the Susquehannah. Others, again, found its true relations in the Lappish, the Ostyak, the Tungus dialects, and other tongues of North Siberia. On the other hand, the admirers of the Celtic tongue endeavoured to establish what, at one time, was considered the noblest of origins, a Hebrew descent. This Semitic relationship was, no doubt, suggested by the traditions of an eastern origin, which pervade the Irish chronicles. As every ethnological puzzle was attempted to be solved by means of the Ten lost Tribes of Israel, it was of course suggested that the Irish were descended from them; the favourite Semitic ancestors of the Celts of the west were, however, not the Israelites, but their cousin-germans the Phenicians; as *p* is always represented in the Irish by *f*, the *bearla fene* was the *lingua punica*: and then was not the *báiltainé* of May-eve a remnant of the worship of Baal? Carthage was founded by the Phenicians; the Carthaginians must, therefore, have been cousins of the Irish, and, consequently, the fragments of their language preserved in the *Pænulus* of Plautus may be interpreted through the Irish; and so they were. But Sir W. Betham left Vallancey a great way behind, when he found that the affinities between the Irish and the Hebrew were often so close that he could not detect closer between the Irish and Welsh!

There seems to have always existed among writers on languages a belief in the great antiquity of the Celtic tongues, —that they were much more ancient than most other European languages; and under this impression it was suggested that the Greek, Latin, and even the Sanskrit tongues were derived from them, or rather from a primitive Celtic mother-tongue. If even a fourth or fifth cousinship could not be permitted with the Greek or the Gothic, how could it be tolerated that Celtic should be made the progenitor of them all? Accordingly, such pretensions were thus summarily dismissed by a writer who, whatever may have been his pretensions as an Orientalist, seems to have had no claim to be considered a Celtic scholar, except perhaps that of having a Gaedhelic name. “The Celtic, therefore, when divested of all words which have been introduced into it by conquest and religion, is a perfectly original language; but the originalities incontrovertibly prove that neither Greek, Latin, or the Teutonic dialects, nor Arabic, Persian, or Sanskrit were derived from the Celtic, since these languages have not any affinity whatever with that tongue”.^a The tradition which brought the Milesian Irish through Spain in their journey from the East, suggested an affinity with the Basques and Gascons, which some persons have stated to be so close, that an educated Irish-speaking man would be able to hold a dialogue with a Basque peasant speaking the Escaldunac. There is, of course, not the shadow of a ground for this statement, but Irish and Basque affinities are still confidently spoken of by English writers who know neither the Irish nor the Escaldunac tongue.

The Escaldunac is not the only tongue, the affinities of which are still doubtful or obscure, with which the Celtic languages have been connected by English writers; for Armenian, and Albanian, and even Coptic words have been found in them. That some affinity exists between Celtic and the first two is of course probable enough, as they are now beginning to be considered Indo-European; but the grounds upon which such affinities were assumed were as unscientific as those which connected the Irish with Phenician.

It was only through sources like Pinkerton, Vallancey, Betham,

^a Researches into the origin and affinity of the principal languages of Asia and Europe, by Lieut.-Col. Vans Kennedy. London, 1828, p. 85.

and Kennedy, that thirty years ago the scholars of France, Germany, and other foreign countries could have learned anything of the Celtic language or literature of these Islands; and scarcely anything was known of the Armoric of Bretagne. What wonder then that Malte Brun, F. Schlegel, and others, should have adopted the opinion of Pinkerton, that Irish was a peculiar language unconnected with the other European tongues? The first man who had the merit of investigating the problem of the affinities of the Celtic was the distinguished ethnologist Dr. Prichard, who in 1832 published a supplement to his *Researches into the Physical History of Mankind*, under the distinct title of *The Eastern Origin of the Celtic Nations*.^b Before the publication of this work, Bopp had published his Sanskrit Grammar, and J. Grimm his great German Grammar, works which mark an era in the history of comparative philology. Dr. Prichard was consequently able to base his inquiries upon the labours of these great scholars by whom the true foundation of the science has been laid. Although this work is now of very little, if any use, it was, considering the time at which it was written, and that the author appears to have been only able to use chiefly the modern forms of the Welsh, in which the inflexions are to a great extent lost, a very meritorious work, and one which will always be valuable in a historical point of view, as the first in which a true scientific method of investigation was attempted. In this work Dr. Prichard endeavoured to prove that the true affinities of the Celtic languages were with the Sanskrit, Greek, Latin, Gothic, and Slavonian, which were considered to form a family derived from a single primitive tongue, and to which the name Indo-Germanic was given, and furthermore, that it was a member of that family, which should henceforward more appropriately be termed the Indo-European, or, as it seems now destined to be called, the Aryan family.

Soon after the appearance of Dr. Prichard's work, and, no doubt, owing in a measure to it, the Celtic languages began to attract the attention of Continental scholars. Comparative philology had now grown into a great science, and was vigorously cultivated by many ardent labourers. Between 1837 and 1840,

^b A reprint containing much additional matter, but altogether of an ethnological character, by the editor, Dr. Latham, was published in 1857.

three important works on Celtic philology appeared. The first was *De l’Affinité des Langues Celtiques avec le Sanskrit*, by Adolph Pictet (Paris, 1837). The author, who had long devoted his attention to the subject of Irish antiquities, having published, in 1824, his work on *Du Culte des Cabires chez les Anciens Irlandais*, made the Irish the basis of his study. This work still retains its value, and its author is still an ardent and respected labourer in the same field. The second work was *Die Celtischen Sprachen* of Bopp, which was published at Berlin in 1839. This work, which contains several important discoveries, may be looked upon as a supplement to his great work, the *Comparative Grammar*, which did not include the Celtic. The third work was the *Celtica* of Dr. Diefenbach, which was published at Stuttgart in 1839 and 1840. Although this work is rather ethnological than philological, yet, as the first part was the earliest attempt to bring together the numerous Celtic words, or, at least, those which are presumed to be so, that are scattered through the works of Greek and Roman authors, and determine their comparative etymological relationships with different languages, it must always be regarded as one of the classics of Celtic philology.

The honour of having done in a great measure for the Celtic dialects what J. Grimm did for the Germanic ones by his celebrated grammar, and of having thus established the basis by which the Indo-European character of those dialects could be subsequently rigorously established, was however reserved for J. Kaspar Zeuss. After thirteen years of labour, he unexpectedly presented to the world in 1853 his *Grammatica Celtica*, written in Latin, a monument at once of his genius and of his unexampled perseverance. In this great work he has left us the materials by which we may clearly establish that the Celtic languages are pure Indo-European tongues without any admixture of heterogeneous foreign elements, and consequently that they are members of the family in the same sense that Latin or Gothic is. That the labours of his predecessors had not definitely settled the latter point, or at least had not brought conviction to the minds of many English ethnologists, is very evident from the following observation of Dr. Latham: “A relationship was mistaken for *the* relation. The previous tongues were (say) second

cousins. The Celtic was a fourth or fifth. What was the result? not that a new second cousin was found, but that the family circle was enlarged".—*Man and his Migrations*, p. 87.

It is right to state that the writer in question does not seem to have been influenced in his opinion by the publication of the *Grammatica Celtica*. The passage above quoted was written in 1851. Here is what he says in 1857: "The real condition, however, in which Prichard left the question was this, viz., that if the value of the class called Indo-European was to be raised by any fresh additions, the Keltic group of languages should form either the part or the whole of such additions. More than this I cannot find in his paper; more than this I cannot find in either Bopp's or Pictet's; more than this I cannot find anywhere. By which I mean that I nowhere find evidence upon either of the two following questions: 1st, That the Kelt (or indeed any other language) can be made Indo-European without raising the value of the term. 2nd, That any good is effected by so raising it.

"If the writers in question expressed themselves to the fact that the tongues in question were absolutely Indo-European, or (still more) if they derived them from the East, they left omissions in their argument which, to say the least, were illegitimate".—*Prichard's Celtic Nations*, by Latham, p. 356.

Dr. Latham, to be sure, seems to attach very little importance to the labours of comparative philologists of the German school; for he does not believe in the method of analysis by letter-changes. He says, "Whether the clever manipulation of letter-changes has, by enabling men to go wrong according to system, done as much harm as it is destined to do, is doubtful. It is pretty certain that it has done almost all the good of which it is capable. For all useful purposes, Prichard used it, the results being what we have seen. It is not, then, from this quarter that any advancement of Kelt ethnology is to be expected"—*ibid.*, p. 382. If the instrument of research in comparative philology be not the use of the laws of letter-changes, what is it? Dr. Latham does not tell us, at least he does not do so in the following passage: "An improved logic, and a greater sobriety of idea, combined with a great breadth of view, are the real desiderata, at least for the settlement of the more general questions"—*ibid.*,

p. 382. These are desiderata in all scientific inquiries, but they do not constitute the method of research of a science. Either the changes which the words of any given language undergo when that language branches into dialects or distinct languages, are arbitrary, or follow regular laws. If the former, the relations of languages can only be guessed at from the accidental resemblance which words may offer when placed at random in parallel columns; in this case there can be no *science* of comparative philology. If the latter, the first problem for the philologist is to determine the phonetic laws of each language; and no dependance can be placed upon any conclusions which may be drawn from researches made upon languages, the phonetic laws of which are not accurately known. These laws can only be determined by careful induction from many and varied researches. Even were the phonetic laws of a whole family of languages accurately known, it does not necessarily follow that every one could use them correctly. As in every other branch of science, a true instrument may be wrongly or unskilfully used. No one objects to mathematics as an instrument of investigation in physical science, because, having been wrongly used, it has sometimes led to erroneous results. For the same reason, the mistakes made by Leo about the Malberg glosses upon a copy of the *Lex Salica*, or Holtzmann's astounding conclusion that the Gauls were Germans and that both were Celts, is no proof against the doctrine that a correct etymology can only be arrived at by means of a study of the letter-changes. In the hands of Bopp and of his school, comparative philology, founded upon a judicious use of letter-changes, has been raised to the rank of an inductive science. But this does not imply that Bopp never made a wrong induction or proposed a false hypothesis. In comparative philology, as in all other sciences, no hypothesis, however logically established, can be wholly true; the proportion of error in it will, among other things, depend on the state of development of the science, and on the greater or lesser generality of the hypothesis itself—that is, on the greater or lesser number of phenomena embraced by it.

This brings me to a more general objection which is raised, not merely to comparative philology, but to all science:—namely, that its hypotheses are continually changing. To make this

objection, or such an one as has been made to letter-changes, of an illegitimate use having been made of its methods, is to mistake the scaffolding, by means of which an edifice is erected, for the permanent structure itself. If a little more attention were bestowed upon the historical development of different branches of science, the mistake would not be so frequently made. We should then learn what a large amount of scaffolding and useless materials are cast aside in the course of a single century's growth—scaffolding and materials which may, perhaps, have formed the sole subject of that century's intellectual strife.

Once the Celtic tongues were proved to be Aryan, the detailed study of their grammar, from a comparative philological point of view, became a necessity in connection with the comparative grammar of the whole family. In 1856 a special journal was established in Germany, called *Beiträge zur vergleichenden Sprachforschung*, devoted to the Aryan, Celtic, and Slavonian languages, edited by Drs. Kuhn and Schleicher, as a kind of supplement to the well-known *Zeitschrift für vergleichende Sprachkunde*, founded by Drs. Th. Aufrecht and Ad. Kuhn, and now edited by Dr. Kuhn alone, the domain of which is the Germanic, Greek, and Latin. Of the *Beiträge*, a volume consisting of four parts appears every two years; three volumes have already been published. It is eminently entitled to the support of all persons interested in the advancement of Celtic philology, and no public library in Ireland, Scotland, or Wales, at least, should be without a copy. Besides the papers published in this repertory, there is now quite a Celtic philological literature, of which I shall only mention a few of the most important works, namely, the remarkable book of Glück, about the Celtic names which occur in Cæsar (*Die bei C. J. Cæsar vorkommenden keltischen Namen, in ihrer Echtheit festgestellt und erläutert* von Cr. W. Glück, Munich, 1857); the *Ethnogénie Gauloise* of the Baron Belloguet, which contains a Gaulish glossary, and a collection of Gaulish inscriptions; the *Monuments des Anciens Idiomes Gaulois*, par H. Monin, Ancien élève de l'Ecole Normale. Paris, 1861; and the *Origines Europææ—Die Alten Völker Europas mit ihren Sippen und Nachbarn: Studien von Lorenz Diefenbach*. Frankfurt a. M., 1861.

Among the Celtic papers which appeared in the *Beiträge*

were a remarkable series entitled *Celtic Studies*, by Dr. Hermann Ebel, the separate titles of each being:—1. Loss of *p* in Celtic (vol. I., p. 307); 2. Some prepositions (*ibid.*, 311); 3. The pronoun *som*, *sem* (*ibid.*, 313); 4. Declension (*ibid.*, 155; No. 4 appeared before the others); 5. The so-called prosthetic *n* (vol. II., p. 64); 6. Addenda to Declension (*ibid.*, 67); 7. The gradation (*ibid.*, p. 78); 8. Phonology (*ibid.*, p. 80). Besides these there is a paper entitled Celtic, Greek, Latin, the subject of which is the position of the Celtic languages in the Indo-European family, and a still more important and elaborate one on the same subject entitled the *Position of the Celtic*. Of the Celtic Studies the most important is the paper No. 4, on Declension; it is indeed nearly equal in length to all the others put together. Nos. 5, 6, and 7 may be looked upon as supplements to No. 4. The object of these papers on declension was to determine, according to the principles of the Boppian School, the kinds of stems which belonged to the several series of each order of declension, according to the classification of Zeuss, and attempt from this to determine the case-endings antecedent to the oldest forms known, and thus determine the various changes which they underwent from the primitive or mother-tongue of the family.

I felt that papers of this kind ought to be brought under the notice of Celtic scholars, and especially of Irish scholars, and I accordingly undertook to translate the papers on declension for the ATLANTIS. When the translation was complete, I found that by itself it would be practically unintelligible to the majority of those for whom it was written. Zeuss has the reputation of being very difficult to be understood, and with equal truth the same may be said of Dr. Ebel; for in the first place his papers presuppose a knowledge of the *Grammatica Celtica*, and in the second place because, like the German philologists generally, his style is extremely condensed. There is a third difficulty, which is, however, a local one. Comparative philology is not very much studied in Great Britain or Ireland, and although Bopp's great comparative grammar has been translated, yet scholars are not in these countries very familiar with the method of analysis of the Boppian school. Irish scholars, likewise, with very few exceptions, have not hitherto turned

their attention in this direction. Perhaps this is the less to be regretted in the case of those who have heretofore devoted themselves to the study of the ancient language, literature, and historical monuments of Ireland, because, had the object of their labours been the mere abstract study of the Irish language, we should perhaps not have obtained the great results in a national point of view, which those labours have yielded. There is, perhaps, no country in Europe, in which in the same space of time and under a similar amount of difficulty, so much has been done, in about twenty-five or thirty years, for the collection, preservation, and publication of the records of its ancient history, as in Ireland. So, also, it would be difficult to rival in patient and conscientious work and solid learning such men as Petrie, O'Curry, O'Donovan, Todd, and Reeves, to speak only of those who have occupied themselves with the earlier periods of Irish history and archæology. The period has now, however, arrived, when the cultivation of Comparative Philology, besides its own intrinsic worth, would confer important advantages upon Irish literature, and very greatly facilitate the study of the ancient MSS. I thus ran the risk of labouring in vain, and of missing the opportunity of stimulating some of our young scholars to enter, and earn for themselves a name in a field of study which is so peculiarly their own, and for the cultivation of which they possess so many advantages. Under these circumstances, I had no alternative but to prepare an explanatory introduction—to venture in fact upon the hazardous undertaking of becoming, without any special qualification, the interpreter of the German School of comparative philology.

My first idea was to make an introduction of two chapters; the first to contain an explanation of the nature of roots and stems, the formation of stems and their classification, and of derivation and composition as distinguished from stems. In the second chapter I proposed to give a summary of the case-endings of nouns in the several Indo-European languages, in order to afford the student an opportunity of comparing the Irish forms with those of the other members of the family. As the limits which a periodical necessarily imposes were exceeded by the first chapter, which was of course the most important for my purposes, I was unable to add the chapter on the case-endings. For the same reason,

as well as on account of pressure of other occupations, I was only able to publish, in No. V. of the *ATLANTIS*, Nos. 4, 5, and part of 6, of the *Celtic Studies* connected with declension. It has been stated above that Dr. Ebel's papers are based upon the *Grammatica Celtica*. To study them profitably, indeed to do so at all, the reader must have before him the part of that work on declension. As many of those into whose hands the *ATLANTIS* was likely to have come, may not have had an opportunity of consulting that book, I thought it desirable to add in the form of an appendix, a translation of the part just alluded to; some of the shortest passages in other parts of the book referred to by Dr. Ebel were likewise translated, and placed among the foot notes. As the paper on the *Position of the Celtic* possesses interest for a wider circle of readers than those on declension, I translated it also, and published it in No. VI. of the *ATLANTIS*.

Some friends having suggested that it would be desirable to have separate copies of these papers printed before the type of the *ATLANTIS* was distributed, I thought it a favourable opportunity to add the *Studies* omitted through want of space, namely, on the Celtic Dual, on the Degrees of Comparison, and an extremely important one, 9. *Zur Lautlehre*, which had been in the meantime published in the first part of the third volume of the *Beiträge*; I have likewise added the chapter on Case-Endings. I also took advantage of this opportunity to considerably modify the first chapter in several parts, with a view of more clearly distinguishing the different kinds of stems, and marking the difference between stem-formation and derivation. Although Dr. Ebel does not place his paper on the *Position of the Celtic* among his *Celtic Studies*, I thought it more convenient to do so, to avoid the necessity of a long title. I have also put all the papers on Declension together as a chapter divided into sections, the shorter papers forming in every case a distinct section.

As it may add to the value of the paper on the *Position of the Celtic*, to give a brief analysis of the discussion out of which it arose, I will give here the substance of the note with which I prefaced it in the *ATLANTIS*.

So soon as the Celtic was firmly established as a branch of the Indo-European family of languages, the next question to be determined was its position with respect to the other branches of

the family. The general opinion at one time was, that the Celtic branch first separated from the parent stem. To this early separation was attributed its apparent deviation from the family type, above all, the mutilation and partial loss of its inflexions, which is found even in the oldest Irish. In an admirable article, published in the seventh volume of the *Zeitschrift für vergleichende Sprachforschung*, Dr. Lottner endeavoured to show, that no special relationship could be scientifically established between the Hellenic and Italic branches of the Indo-European family, a doctrine which must appear heretical to most classical scholars. In discussing this subject he had formed the opinion that the Celts, Germans, and Lito-Slavonians had lived together as one people, and from them the Celts first separated, and then the Germans. In a short paper, entitled "*Celtisch, Griechisch, Lateinisch*" (Beitr. I. 429), Dr. Ebel discussed the position of the Celtic, and on the whole supported Lottner's view of an intimate relation between the Celtic and German languages. Indeed, he appears to have long entertained such an opinion; for he says, in the paper just alluded to: "I cannot deny that already on my first acquaintance with Zeuss' *Grammatica Celtica*, the Celtic made an impression on me of an intimate connection with the Northern Languages, and that this impression had been continually strengthened during my Celtic studies". In the very same number of the *Beiträge*, and immediately following the paper of Dr. Ebel, there is a paper by the distinguished philologist Prof. Schleicher, entitled, *Die Stellung des Celtischen im Indogermanischen Sprachstamme*, in which he says: "If in those words of Ebel (just quoted) I put Latin, instead of Northern languages, I will accurately describe the impression which the study of the Celtic made on me". As may be anticipated from this, Prof. Schleicher is of opinion, that the Celtic is most nearly connected with the Graeco-Latin branch, standing towards those languages somewhat in the same relation that the German does to the Slavo-Lettish, coming nearer to the Italic (Latin), however, than to the Greek. The object of his paper is to bring forward arguments in support of this Latin relationship, while he left to Ebel the task of discovering the agreements between the Celtic and the Northern Languages. The paper which is here translated is Dr. Ebel's answer to that invitation. Instead, however, of

attempting to determine the agreements in question merely, he has taken a wider range, and endeavoured to lay a solid foundation from which the whole problem of the affinities of the Celtic with all the other members of the Indo-European family may hereafter be investigated.

Since the publication of Dr. Ebel's paper, Dr. Lottner has published another under the title of *Celtisch-Italisch* (Beitr., ii. 309), in which, without at all departing from his opinion regarding the absence of special affinities between Latin and Greek, he has slightly modified his views about the position of the Celtic. This change is due to the light which the Gaulish inscriptions have thrown upon the forms of the Old Celtic. * These inscriptions reveal to us words which not only do not yield in antiquity of form to those of classic Latin, but even attain, in many respects, that of the archaic language of the Romans. They show, beyond a doubt, that the inflexions which Irish has retained are older than the absence of inflexions in Welsh, and that the wonderful phonetic peculiarities of the modern Celtic, the umlaut, aspirations, the nasals in the Old Celtic, are foreign to it. One interesting result has followed the investigation of these inscriptions, namely, that they give us in part the very forms which were anticipated by Dr. Ebel according to the phonetic laws of the later Celtic. As I cannot give a translation of the whole of this interesting paper, I may, however, state the ethnological deduction which he has made. First, as he had already shown in his paper published in the *Zeitschrift*, the European bough of the Indo-European family, after its separation from the Asiatic one, formed a single people, from which the Hellenes (or perhaps the Helleno-Phrygians) first separated. The remainder subsequently split into two divisions, the South-West and the Northern. The former became subdivided into the Italic and Celtic branches, while the latter became subdivided into Germans and Slavonians, the Slavonians in turn becoming further subdivided into Slaves proper and Letts. Of course, much remains to be done before this ingenious hypothesis can be looked upon as more than a probable explanation, and more than this Dr. Lottner does not claim for it. It has much to recommend it, however; it rationally explains the ethnological problem of the present European races, and this explanation harmonizes with the ancient Irish tradition

respecting the Celtic one. Although genealogical traditions of races reaching back into very remote times are not safe materials out of which to frame ethnological theories, neither can they be altogether disregarded; and consequently a hypothesis founded upon strictly scientific deductions, which, at the same time, accords with the popular traditions, may be fairly considered to possess many elements of truth.

It is almost unnecessary to say that an introduction such as that which I have prefixed to Dr. Ebel's papers, could, from its nature and objects, be to a great extent only a compilation from the works of those scholars who are considered to be masters in the science. Indeed, I have avoided, wherever I could, introducing any examples of my own. In the classification of stems, I have, however, ventured to deviate in some degree from that usually followed, whether with advantage or not remains to be seen. In an essay intended to be merely explanatory of a system, and admittedly compiled from the works of those who are authorities upon it, it is not necessary to refer to those authorities in every case in the text; here, however, it may be useful to mention the chief books to which I am indebted for materials. These are: Bopp's *Vergleichende Grammatik* (2nd ed.); Grimm's *Geschichte der Deutschen Sprache*; Curtius, *Die Bildung der Tempora und Modi*; and Heyse's *System der Sprachwissenschaft*, edited by Dr. H. Steinthal.

A great many notes have been added to the papers by Dr. Ebel on Declension, and a considerable number of words added to the lists in his paper on the "Position of the Celtic", especially to that of the Latin loan-words in Old Celtic. For the most of these additions, which are distinguished by being enclosed in [], I am indebted to Whitley Stokes, Esq. I also take this opportunity to give my best thanks to that distinguished scholar, Prof. C. Lottner, from whom Celtic philology has so much to expect, for the great pains he took in looking over the proof sheets; and also to my friend, John E. Pigot, Esq., without whose encouragement the task would never have been undertaken.

With the view of rendering the materials contained in the important paper *On the Position of the Celtic* as serviceable as possible in the construction of that great desideratum of Irish lite-

rature, a dictionary, I have added full Indices Verborum. This addition has added much to the size of the book, but I hope it will be found to be a practical contribution to Irish lexicographic materials.

In conclusion, I wish to direct the attention of such of my readers as may not be members of the Irish Archæological and Celtic Society to a work published by that body, which contains much that illustrates the subject of the following pages, or that is actually supplementary to them, namely, *Irish Glosses, a mediæval tract on Irish Declension, with examples explained in Irish*, to which is added the *Lorica of Gildas*, with the Glosses thereon, and a selection of Glosses from the Book of Armagh, edited by Whitley Stokes, A.B.

In point of varied learning, skill, and cautious discretion in the grammatical analysis, the work is unquestionably the best contribution to the comparative philology of the Celtic languages which has yet appeared in the English language, and may fully rank with any similar works by German or French scholars. It is at once a valuable and a timely contribution towards the materials for making an Irish dictionary, and as such the Archæological and Celtic Society has well expended its funds in the publication of it.

The most valuable feature of the work in question, so far as regards the Celtic Studies of Dr. Ebel, is the large number of paradigms of the declension of Irish nouns and adjectives which it contains. For the purposes of reference, I think it will be useful to enumerate them all.

Masculine, neuter, and feminine *a-* and *â-*stems: nom. sing. *cenn*, stem *cinna* (masc.), p. 39; nom. sing. *forcetal* (*ñ*), stem *forcitala* (neut.), p. 51; nom. sing. masc. *mall*, an adjectival stem, p. 97; nom. sing. *rann*, stem *rannâ* (fem. *â*-stem), p. 38; nom. sing. *dia*, a masc. *a*-stem, p. 45.

Masculine and feminine *iâ*-stems: nom. sing. *rannaire*, stem *rannaria* (masc.), p. 37; nom. sing. *caile*, stem *caliâ* (fem.), p. 54; nom. sing. masc. *núe*, an adjectival *iâ*-stem, p. 97.

Masculine and neuter *i*-stems; nom. sing. *fáith*, stem *fáithi* (masc.), p. 36; nom. sing. *fiss*, stem *fissi* (neut.), p. 117.

Masculine *u*-stems: nom. sing. *bith*, stem *bithu* (masc.), p. 62.

Masculine *t*-stems: nom. sing. *fili*, stem *filiat* (masc.), p. 36.

Masculine *g*-stem: nom. sing. *rí*, gen. *ríg*, a masculine *g*-stem, p. 119.

Feminine *n*-stem: nom. sing. *talam*, stem *talaman*, p. 48.

Ant-stems: nom. sing. *cara*, stem *carat*, from *carant* (masc.), p. 65. A para-

digm of the declension of *ainm* (*ü*), probably originally an *ant*-stem, but which was in Old Irish a neuter *ann*-stem, is also given at p. 116.

Masculine *r*-stem : nom. sing. *athir*, stem *athar*, p. 39.

C-stems : nom. sing. *cathir*. According to Dr. Ebel (see p. 94), *cathir* is an *r*-stem, taking the determinative suffix *c*, but Mr. Stokes considers it to be a *c*-stem, p. 38.

Anomalous nouns: nom. sing. *ben*, all the singular and plural forms of which are given, p. 121.

At p. 45 a paradigm of the declension of the article is also given. What renders these paradigms the more valuable is, that in almost every case the forms of the dual number are also given. As several of the words declined by Zeuss and Dr. Ebel are also declined by Mr. Stokes, the corresponding paradigms of each writer may be instructively compared.

Dr. Ebel's papers are frequently referred to in Mr. Stokes's book; and as each may be said to, in a measure, supplement the other, the almost simultaneous appearance of the following translation of the Celtic Studies, and of the admirably edited book in question, may be deemed a fortunate coincidence. I hope, also, that the introduction which I was obliged to prefix to the papers of Dr. Ebel may likewise enable a larger circle of readers to appreciate the importance of Mr. Stokes's contribution towards our more perfect knowledge of the language of Ancient Erin.

CONTENTS.

INTRODUCTION.

CHAPTER I.—ON SIMPLE WORD-FORMATION: ROOTS, STEMS, AND DERIVATIVES.

- § 1. *Of Roots and Root-forms.* Nature of a root as a phonetic symbol, p. 3. The permutations or letter changes which take place in the same word in different dialects of the same language, or in different languages of the same family, not arbitrary, p. 3. Example of the law of transposition or provection of sounds (called by Grimm *Lautverschiebung*), p. 3. The analysis of words which have had a common origin does not give roots, but only root-forms, p. 4. Root-forms of the same root often very dissimilar: examples, p. 4. Objects of modern comparative etymology, p. 4. Modern classification of the kinds of words of which rational speech is composed, p. 4. Corporal and formal, or formational words, p. 5. Corporal and formational roots, p. 5. Of the composition of roots in words: 1. Parathesis; 2. Agglutination; 3. Amalgamation, p. 6. Classification of languages according to their relative degree of composition, p. 6. Bopp's classification somewhat different from that here given, p. 6. The amalgamating languages the most complex; are represented by the Indo-European or Aryan family of languages; such languages contain no uninflected roots in their primitive state; but many naked roots occur in their modern derivatives, pp. 6-7. Roots preserve their identity; exception to this in the process called Root Variation; this process gives rise to affiliated roots, one of which is primary to the others; all large roots are secondary; examples, p. 7.
- § 2. *Of Elementary Word-formation and Inflection.* Word-formation or Word-building; elementary words must be further modified by inflexion; the process of elementary word-formation and inflexion the same; what those are:—1. internal phonetic change; 2. addition of phonetic material, p. 7-8. Vowel change a predominant process of this kind in the Semitic languages; only appears as *ablaut* in the Indo-European tongues; definition of *ablaut*; chief agent of word-formation in the Teutonic languages, p. 8. Of *umlaut*; it acquires inflexional signification: examples, p. 8-9. Of Breaking or Fracture, p. 9 (note on the German nomenclature employed, note 4, page 8). Progressive assimilation in the Finno-Tatarian family, a kind of *umlaut*; the rule "*caol le caol*" in Irish, and the weakening of the root vowel in Latin by the vowel of a prefix, may be considered as progressive assimilation, p. 9-10. Affixes the chief agent of word-formation in Indo-European tongues; the affixes used in word-formation and inflexion, and in composition; some of the affixes used in word-formation and inflexion traceable to independent words;—examples; generalization of this result; word-formation and inflexion were originally synthesis of independent roots;—this view is the basis of the agglutination theory; the theory now generally admitted; some, however, modify it so as to admit two kinds of affixes, p. 10-11.

- § 3. Of the stem, a form intermediate between the root and the word; distinction between roots and stems; stems are of many kinds; hence there are four categories of phonetic forms, p. 11-12. Word-formation consists of stem-formation and derivation; phonetic methods of primary or pure stem-formation.—I. Modification of the root vowel:—by (a) *ablaut* proper; (b) obscuration; (c) strengthening—either (1) by lengthening a short vowel, or (2) by gunation and diphthongation, (note explanatory of those terms). II. Consonantal strengthening of the root by—(a) duplication of final consonant; (b) affixation of a foreign mute consonant; (c) affixation or intercalation of a nasal—by (1) nasalizing an internal vowel, (2) affixation of the nasal in the auslaut, either after vowels or after consonants, or (3) affixation of a whole syllable accompanied by nasalization; or (d) reduplication;—examples, p. 12-14. Exceptional cases of primary stem formation; *e. g.* an intensive introduced into the root; other classes of true stems; occasional difficulty in distinguishing stems from roots, and simple words from stems, p. 14.
4. Of noun-formation and secondary stems. Separation of grammatical categories by the addition of signs to stems; signs by which a stem becomes a verb; sign of noun-formation (to which the present analysis is confined); distinction of gender; nominative sign—masc., fem., and neuter; Bopp's view as to origin of neutral adj., ending-*ata*; relative degree of preservation of the nominative sign *s* in different languages, p. 14-16. Introduction of a vowel between the stem and ending; the declension vowel (note 7 on the Finnish two-syllabled Stems), p. 16. Cases of stems formed by a whole syllable—derivative Stems, p. 16-17. Two-fold classification of stems according to auslaut and relation to the grammatical ending: I. vocalic stems—1. pure stems; 2. middle forms produced by affixing a declension vowel; II. consonantal stems—1. pure stems; 2. middle forms produced by affixing a syllable ending consonantly, p. 16. Table of the classification of true stems, and of derivative stems, p. 16-17.
5. Of vocalic stems. [I.] Pure stems; examples; Greek, Latin, Gothic; Gothic nouns properly belong to second class, the Teutonic languages having no pure stems (but see note 12, p. 28, for some probable exceptions), p. 18-19. [II.] Middle forms ending vocally. Division of all vocalic stems into *a*-stems, *i*-stems, and *u*-stems, p. 19. (1) I. Stems. Greek, Latin, Gothic; peculiarities of adjectives derived directly from stems, p. 19-20. (2) *A*-Stems. In Greek and Latin: 1. where the primitive *a* is preserved or changed into *e*,—(α) stems with primitive short *a*, (β) stems with long *a* or *e*; 2. where the primitive *a* is changed into *o* in Greek, and *u* in Latin. *A*-stems with primitive *a* short; (examples). Gothic *a*-stems; (examples); peculiarities of Gothic adjectives—examples, p. 20-22. [III.] *yā*-, or *Iā*-stems. Peculiarities in the Gothic, the O. H. German, M. H. German, and N. H. German adjective forms of *ya*-stems—examples from the Latin and Gothic, p. 22-24. [IV.] Consonantal stems changed into vocalic (*a*- and *i*-) stems. Examples from the Latin and the Greek. Apparently irregular Greek stems. Analogy of certain Gothic nouns with the Latin. All these probably consonantal *n*-stems, (note 10, expressing a doubt as to the hypothesis in respect to the Greek stems, and giving a different explanation of Ahrens, p. 24). Tables of examples. Gothic feminine nouns ending in *-ei*; probably mutilated *n*-stems; (examples). Declension, in the Germanic (though not in the Latin or Greek) languages, affected by the dropping of the *n*. Examples. Peculiarity of the weak declension, in adding the *n*. The weak adjective declension; (examples). Examples of vowel endings distinguishing genders. The *s* in “sanguis”, p. 24-26. [V.] *u*-stems. Greek, Latin, Gothic. Peculiarities of adjectives, p. 26-27.

6. *Of consonantal stems.* [I.] Pure stems. (1) *S*-stems; Greek and Latin. (2) Stems with sonant auslauts (semi-vowels: *m, l, n, r, ng*); Greek and Latin. (3) Stems with medial auslauts; Greek and Latin. (4) Stems with tenuis auslauts; Greek and Latin. (5) Stems with aspirated mute auslauts; Greek. Gothic pure stems belong rather to middle forms; examples (note 12 already referred to giving examples of some which are perhaps exceptions), p. 27-28. [II.] Consonantal middle forms. The "thema", distinguished from the true stem form. (1) *S*-stems—Greek and Latin. (2) Stems with sonant auslauts. *L*-stems, *N*-stems, *R*-stems, (Latin, Greek, and Gothic). (3) Stems with medial auslauts. (4) Stems with tenuis auslauts (examples from Greek and Latin), p. 28-31.
7. *Of Derivation.* Affixes: 1. single letters or syllables, not traceable to independent words; 2. syllabic affixes, once independent words, but modified so as to have lost that character. Difficulty of distinguishing stem-formation from derivation. "Derivative Stems" (Greek examples). Examples showing the formation of words by the process of Derivation, pp. 31-33.
8. *Of Composition.* Definition. Peculiar power of composition in the Sanskrit and the Greek; in the Germanic languages. Composition distinguished into: 1. synthetical; and 2. parathetical. Particle composition to be classed as parathetical. Introduction of a copulative vowel in the older languages; Greek and O. H. German; Modern German, and English (examples). Combination sometimes accompanied by phonetic changes in one or both the constituents (examples in the Latin). Relation of the constituents of compound words (examples), pp. 33-34.

CHAPTER II.—ON THE CASE-ENDINGS OF NOUNS IN THE CHIEF INDO-EUROPEAN LANGUAGES.

- § 1. *The Accusative Singular.*—(As to the nominative, refer to Ch. I., § 4). The sign of the accusative: *m*, in Sanskrit, Zend, Latin; *n*, in Greek, Lithuanian, and Old Prussian. Primitive sign probably *m*. In the Latin: *m* affixed, 1. directly to vocalic stems; 2. with intercalated copulative to consonantal stems. Transformation of Sanskrit *m* into nasal *n*, by "*anusvāra*"; (note on "*anusvara*"). Observations as to the Lithuanian, Latin, Oscan. Nominatives in modern languages (Italian, Portuguese, Spanish), derived from the mutilated Latin accusative. Greek and Latin declensions compared. The Greek affix *ν*. Exceptions (stems in *ω* and *εϋ*). In the Gothic the sign of the accusative lost, pp. 34-36.
- § 2. *The Genitive Singular.*—The Sanskrit and Zend, p. 36. The Latin. The genitive in *-ius*, pp. 36-37. The Oscan, p. 37. In the Greek; gen. sing. formed by: (a) affixing *ς* to fem. 1st decl.; (b) affixing *ς* with a copulative *ο*; (c) where the noun does not form the gen. in *ς*, pp. 37-38. The Gothic. The Germanic languages, pp. 38-39. The Lithuanian and Slavonian, p. 39.
- § 3. *The Dative, Locative, and Instrumental, Singular.* The Sanskrit and Zend, p. 39. The Latin. The Oscan, p. 40. The Greek, p. 40. The terminations of adjectives (masc. and neut., and fem.), in the Gothic, O. H. German, and M. H. German, compared; (Paradigm), p. 41. The Lithuanian and Slavonian, pp. 41-42.
- § 4. *The Ablative Singular.* Peculiarities in the Sanskrit, Zend, and Latin. Ablative sign recognizable in adverbs, p. 42.
- § 5. *The Dual.* Peculiar forms only found in Sanskrit, Zend, Greek, Slavonian, and Lithuanian. (Note: reference to Ebel's observations on the relics of the Dual in Irish). Traces in Latin, pp. 43-44.
- § 6. *The Nominative and Vocative Plural.* Comparison of the Sanskrit, Zend, Old Latin, and Greek. Endings in *i*. Neuters in *a*. Plural endings in *-as*; opinions of philologists, pp. 44-45. The Gothic:

(Paradigms of the strong and the weak declension). Comparison of the Gothic with the Old and the Middle High German; (Paradigm). Formation of the plural in the modern languages, pp. 45-46. The Lithuanian and Slavonian, p. 46.

- § 7. *The Accusative Plural*. The Sanskrit, Zend, Greek, Oscan, and Latin compared, p. 47. The Gothic and O. H. German, p. 47. The Gothic *-ns*. Examples, p. 48. Parallel in Greek, p. 48.
- § 8. *The Genitive Plural*. The Sanskrit (*-ām*), and Zend (*-aum*), p. 48. The Latin (*-um*), pp. 48-49. The Greek (*-ων*), p. 49. The Gothic. The M. and N. H. German, p. 49. The Lithuanian and Slavonian, p. 50.
- § 9. *The Dative, Locative, Instrumental, and Ablative Plural*. The Sanskrit and Zend, p. 50. Two forms in the Greek and Latin, pp. 50-51. The Gothic, O. and M. H. German, pp. 51-52. The Lithuanian and Slavonian, p. 52.

Paradigm of all the case-endings of nouns in the chief Indo-European Languages. (The Sanskrit; Zend; Latin; Oscan; Umbrian; Greek; Gothic; O. H. German; Lithuanian; Old Slavonian; Old Prussian).
Folding plate facing p. 52.

CELTIC STUDIES.

CHAPTER I.—ON DECLENSION AND THE DEGREES OF COMPARISON IN IRISH.

- § 1. *Bopp's View of the Aspirations and Eclipses in Modern Irish, and the modifications which it undergoes through the old Irish forms*. Zeuss' determination of the Old forms of the article; (notes, giving the passages from Zeuss). Bopp's opinions modified as to the *t* and the *h* before vowels. (Note on *donā* from *donābis*, correcting Dr. Ebel's theory regarding the O. Irish dat. plur.), (note on "aspiration"—"infection", or "mortification"), (note on the *t* in the nom. sing. masc. of the Irish article), pp. 55-56. Bopp's opinion modified as to the nom. plur. masc., p. 57. Discovery of the neuter, and of the accusative cases in Old Irish, p. 57.
- § 2. *Stems which belong to the several orders and series of Zeuss*. Objections to views of Pictet and Bopp as to the distribution of the vocalic stems, pp. 57-58. Consideration of the words and suffixes which belong to the several classes. Examples, pp. 58-59. Examples of forms in cognate languages, pp. 59-60. Adjectives, pp. 60-61. Verbal substantives taking the place of the infinitive, pp. 61-62. Forms of the article, p. 62.
- § 3. *Test afforded by Irish Phonology for determining inductively the Primitive Forms of the Celtic Case-endings*. Two close points of contact between the Irish and the German vocal systems: umlaut of *a* by *i* and *u*, and fracture of *i* and *u* by *a*. Examples, pp. 62-63. The vowel of the ending determinable by the vowel changes in the stem, p. 63. Table of masc. and neut. endings. (I.); (examples), pp. 63-64. (Note: table of hypothetical endings of masc. and neut.), p. 63. Table of endings of fem. *a*-stems; (examples), p. 64. Table of endings of masc. stems (III.); (examples), p. 64. Table comparing auslaut in Old Irish and N. H. German, p. 64. How the Gaelic has been harder than the Gothic; (examples), p. 65. Explanation of mutilations of the auslaut, p. 65. Table: (Primitive period,—Pre-historic period,—Historic period), p. 66.
- § 4. *Declension of Consonantal Stems*. Zeuss' five classes. Analysis, p. 66. Table of common endings, p. 67. As to the length in the acc. plur. comparison with the Greek, the Latin, and the Gothic, p. 67. Observations on the several cases. Examples, pp. 67, 69. Table of declension of neutral *n*-stems, (I.), p. 69. Nouns of relationship in *-thar*, (II.), p. 69. Table: (Primitive Period,—Pre-historic Period,—Historic Period), p. 70. Addition of a "determinative suffix"; (but,—note on

- this theory of Ebel), p. 70. Comparison of Gaelhelic with the Classic languages as to the consonant declension of the *t*-, *n*-, and *r*-stems, p. 71.
- § 5. *Declension of Masc. (and neut.) A and IA- Stems.* Stems included in the vocalic declension, p. 71. Inflections of masc. *a*-stems; compared with Sanskrit, etc.; (examples), pp. 71-72. Anomaly in the neuters, preparing for disappearance of the neut. in the Gaelhelic, pp. 72-73. As to adjectives, p. 73.
- § 6. *Declension of masc. I and U Stems.* Consideration of each case, pp. 74-76. Table of declensions (of U stems and I stems), arranged according to periods (Primitive, Pre-historic, Historic), but without the secondary forms, p. 76.
- § 7. *Declension of fem. A and I stems.* Confusion in their declension; how the primitive stem only now to be recognized; (but,—note on this). Examples, pp. 76-77. Hypothesis of Dr. Ebel, pp. 77-78 (see also for completion, p. 154). Tables of forms of *ia*-stems compared with those actually occurring, p. 79. Other examples of same degeneration of original forms, p. 79. Modern Irish losing its inflexions, like the Kymric. Examples, pp. 79-80.
- § 8. *The distinction of the plural in the Kymric.* No inflexions preserved in Kymric except distinctions of plural, and this very arbitrarily employed. As in the N. H. German: (1) old plural form remaining, and consequently true inflexion; (2) stem-ending preserved, dropped in the sing.; (3) a determinative suffix, wholly foreign in place of the ending, p. 81. To (1) belong: 1. Kymric plur. without endings; (examples), p. 81; 2. plurals in *-i*; (examples), p. 81; 3. plurals in *-au* and *-iau*, p. 82. To (2): especially *n*-stems; (examples), p. 82. To (3): 1. many plur. in *-au* and *-iau* in which the ending is foreign to the words—stem proper; (examples); 2. most words in *-ion* or *-on*; (examples); 3. endings *-et*, *-ot*, *-ieit*, *-eit*, and *-ed*, *-yd*, *-oed*; (examples), pp. 82-83.
- § 9. *Note on a-, i-, d-, t-, and nt-stems.* Gen. in *-i* and nom. in *-as*, in *a* stems, found in Ogam inscriptions. Obscuration of *a* to *o* at a remote period, p. 83. The neutral *aill*, p. 83. As to Mr. Stokes' corrections, recognizing stems in *-d*, *-t*, and *-nt*, in Zeuss' *Ordo Posterior*, ser. 4, pp. 83-84. As to Dr. Ebel's view of the fem. in Zeuss' *Prior*, Ser. V., p. 84; fusion of *i*- and *â*-stems, p. 86.
- § 10. *On the Celtic Dual.* Answer to Mr. Stokes. Whether the Celtic has a dual; (examples), pp. 85-86. How much of it has been preserved, pp. 86-87. Of undoubted dual-forms only the masc. and acc. of substantives, and the whole of the cases of the numeral Two, pp. 87-88. The *in* of the article, p. 88. Few dual forms of consonantal stems preserved, p. 88.
- § 11. *On the Article in Modern Irish.* Theory as to the article *an*, p. 88. (But—note questioning this theory of Dr. Ebel), p. 89. Observations on certain finer influences of neighbouring languages on one another, p. 89.
- § 12. *On the so-called Prosthetic N.* ["Prosthetic"—"Eclipsing". Theory of Mr. Stokes and of Dr. Ebel, p. 90.] Correction of Zeuss' views as to this *n*. Mr. Stokes' examples. Examples of this *n* as a relic of the article, p. 90. Other examples, p. 91. Some spurious prepositions recognized as accusative forms, p. 91. The *n* of *ainm-n*; previous observation of Dr. Ebel corrected in note, p. 91. Supposed three-fold preposition *do-air-in*, p. 92. The *n* after verbal forms; examples, p. 92.
- § 13. *On the degrees of comparison.* As to the *-ns* stems. The *-a* in the more ancient, *-u* in the newer secondary formations, p. 92. Explanation of these formations, pp. 93-94.

CHAPTER II.—ON THE POSITION OF THE CELTIC.

- § 1. *Views regarding the special affinities of the Celtic and words borrowed from the Latin.* Points of contact between the Celtic and the Italic

- tongues on one side, and the Teutonic on the other, p. 97. Views of Dr. Lottner and Professor Schleicher, p. 97. Celtic closer to Latin than to Greek, p. 97. Points of agreement between the Celtic and the Northern tongues, p. 93. Words in Celtic languages in common with or borrowed from the Latin, p. 98. Method of denoting the Kymric dialects, p. 93. Glossary of Latin loan-words in Old Celtic, pp. 99-107. Words borrowed by the Latin from the Gaulish, and later from the British, p. 107.
- § 2. *Glossarial affinities of the Celtic and Classic languages.* Glossary of words and roots exclusively common to the Celtic and Classic languages, pp. 107-109.
- § 3. *Glossarial affinities of the Celtic, Classic, Teutonic, and Lito-Slavonian languages.* Glossary of words and roots common to the Celtic and Classic languages, but also found in the Teutonic, Slavonian, and Lithuanian, pp. 109-112. Of certain other roots to be added to this list. Examples, pp. 112-113.
- § 4. *Glossarial affinities of the Celtic, Classic, and Teutonic languages.* List of words and roots common to the Celtic, Greek, and Teutonic, p. 113. List of those common to the Celtic, Latin (or Italic), and Teutonic, pp. 113-114.
- § 5. *Glossarial affinities of the Celtic, Teutonic, and Lito-Slavonian languages.* Mutual borrowing among the languages. Examples of borrowed words, pp. 114-115. List of words and roots common to the Celtic, Lithuanian, Slavonian, and Teutonic, pp. 115-116.
- § 6. *Glossarial affinities of the Celtic and Teutonic.* List of words and roots common to the Celtic and Teutonic, pp. 116-119.
- § 7. *Glossarial affinities of the Celtic and Lito-Slavonian.* List of words and roots common to the Celtic, Lithuanian, and Slavonian, p. 119. Original words in the Celtic, p. 119. Agreement with the Sanskrit in nomenclature of the cardinal points, p. 119. Summary of results of the foregoing tables, as regards the true relation of the Celtic to other European languages, pp. 119-120.
- § 8. *Phonological affinities:—Vocalismus.* Study of principles on which to judge of an earlier or later separation of tongues yet imperfect. Example: comparison of treatment of the neuters in the Old Gaelic and the Hebrew,—the Polish and the Slavonian. Want of a geography of sounds; (note on this subject), pp. 120-121. The elementary development of the vocalismus only to be followed out with clearness in the Gothic, p. 121. The Gothic short vowels, *a, i, u*, p. 121. The Latin and Greek, and the Celtic compared, pp. 121-122. Analogous vowel changes in Teutonic, Slavonian, and Celtic roots, p. 122. In the diphthongal system the Celtic nearest to the Teutonic. Examples, p. 122.
- § 9. *Phonological affinities:—Consonantismus.* Celtic analogous to Lithuanian and Slavonian in having no aspirate in its older phonetic stage, p. 122. Celtic in this contrasts with the Greek, p. 123. Deviations from the Teutonic, p. 123. Agreements, p. 123. Changes of secondary aspirates into medials, or medial-aspirates, p. 123. Hardening of medials in the Celtic and Teutonic, p. 123. The Gaelic thickening of the *n* (or *nn*), p. 123.
- § 10. *Affinities of word-formation.* The suffix *-tion* exclusively Italo-Celtic, p. 123. Other suffixes; (*-li*; *-iâ*; *-aire*; *-ire*; *-dôit*;) p. 124. The peculiar suffix-combination: *antat*, (*-atu*, *-etu*), p. 124. Celtic word-formation of a modern character, p. 124. Wider use of *K* than in the Classic languages; (*-ach*), p. 124.
- § 11. *Affinities of declension.* Only the Pelasgic languages have fem. *a*-stems. Agreement of Celtic with the northern languages, p. 124. Masc. *a*-stems foreign to the Celtic, p. 125. Few fem. *u*-stems in Celtic, p. 125. Celtic approaches the Classic languages in having preserved more pure consonantal stems, but differs from them in treat-

ment of *s*-stems, p. 125. As to the ablative, p. 125. As to the *b* in the dative plural, p. 125. Want of pronominal declension, p. 125. Agreement of gen. sing. and nom. plur. of masc. *a*-stems in the Old Gaedhelic and the Latin, p. 125. Other agreements less exclusive, pp. 125-126.

- § 12. *Affinities of gradation (or comparison)*. Peculiar forms of gradation in the Greek, the Latin, the Celtic. Analogy of some Gaedhelic forms, p. 126.
- § 13. *Affinities of the pronouns*. Celtic peculiarity in giving up the nom. sing. of the 1. and 2. person, p. 126. Analogy with the Teutonic in the 3. person, p. 126. Analogy with forms in the Sanskrit, p. 127. 'The *ta*; the *ana*; p. 127.
- § 14. *Affinities of conjugation*. Peculiar combinations and new formations in conjugation. Examples, p. 127. Remarkable analogy with Teutonic and Slavonian, p. 127. Paradigm of Old Gaedhelic and Lithuanian—ending of the present and preterite, p. 128. The Kymric *-st*, (2. pers. sing. præter.) p. 128. Pictet's view of this *-t*, p. 128. Distinction of the imperfect and perfect in the Slavonian by separate verbs, p. 128. Use of the present as a future, p. 129. Peculiar force, in the Teutonic and Slavonian, of the particle in composition, p. 129. Analogy in the Celtic; (1) the perfect denoted by a special particle; (*ru*-; *ro*-; *ra*-), pp. 129-130. Peculiarity of Celtic in use of this particle, p. 130. (2) The pres. and fut. changed into the perfect future exactum by this particle (*ro*-), p. 130. (3) The present forms (especially the conjunctive pres.) turned into future by it, p. 129. All three uses in the Gothic, p. 131. Gaedhelic particle to tenses of incomplete action, (*nu*-, *no*-), p. 131. Middle position of the Celtic, between the Italic and Greek, and the Teutonic and Lito-Slavonian, p. 131. Other points of contact to be sought in a comparative syntax of these languages, p. 131.

CHAPTER III.—ON PHONOLOGY IN IRISH.

- § 2. *Necessity of establishing an organic orthography; and great importance of a comparison of the modern Irish forms for the purpose*. Schleicher's opinion, p. 135. Want of linguistic materials on the continent, p. 135. Inaccuracy of those published: (examples in Zeuss, O'Donovan, etc.) p. 135. How to attain what is required, p. 135. Comparison wanted between Middle and Modern Irish forms, p. 136.
- *Disfigurement and irregularity of Modern Irish forms; (errors of Pictet and Bopp)*, p. 136. Examples, pp. 136-138. Necessity of comparison with newer forms nevertheless; (error of Zeuss), p. 138.
- § 2. *Vocalismus*. The chief difficulty of the Irish phonetic system, p. 138. Three kinds of *e* and *o*, p. 138. Suggestion of a mode of distinguishing them in print, p. 138. Examples, p. 139. Of the *a* corrupted from the *o* in Old Irish. Examples, pp. 139-141. Correction of mistake in preceding chapter, (p. 88; § II. *On the article*, etc.) as to the modern form of the article *an*, note, p. 140.
- § 3. *Consonantismus*.—*Aspiration of mediae after vowels*. Important results of comparison of the newer forms. Examples, p. 141. Influence of the *s*, p. 141. Comparison of the modern forms especially necessary to determine whether the tenuis or media is to be aspirated or not. Examples, pp. 141-142. Aspiration of the simple *m* in Modern Irish. *M*. for *bh*. *Mm* (or *mb*) in Old Irish, deduced from *m* (in inlaut) in Modern Irish. (Note: *mm* in several examples, compared with the *nn* of the article), p. 142. Mediae after vowels always aspirated in Modern Irish; after consonants not so, except where a vowel dropped out, pp. 142-143. Mediae assimilated after liquids, p. 143. Observation on the so-called Eclipse, p. 143.

- § 4. *Consonantismus*.—*Aspiration of tenues after vowels*. Tenues when aspirated, pp. 143-144. Organic Mediæ changed into tenues in Old Irish, in two ways, p. 144. Comparison of Modern Irish, pp. 144-145. Observation as to the so-called eclipse of the tenuis, p. 145. Conclusion: (Examples), p. 146.
- § 5. *Consonantismus*.—*Cases which afford occasion for aspiration after a preserved or lost vowel*: (I.) in *anlaut*; (II.) in *anlaut*; (III.) in *syntax*. Inference of aspiration from the presence of a vowel, p. 146. Examples. Three categories.
- (I.) In *anlaut*, p. 147. Examples from conjugation, p. 147. Confirmation of Zeuss as to the *l, n, s, d, t, th*. (Observation as to O'Donovan on the Modern Irish Passive and Participles), pp. 147-148. Examples, from declension, p. 148. Derivatives in *-te*, p. 149. Derivation with various suffixes, p. 149.
- (II.) In *anlaut*. Of the second member in composition, p. 150. Omission by Zeuss as to the exceptions to the aspiration rule, p. 150. Grimm's observations as to *t* and *d*, in Mod. Irish, remaining unchanged after liquids, not quite correct. ("*Mactire*", explained), p. 150. Examples of other exceptions, p. 150. Explanation of "*Dunpe-leder*" in Zeuss, p. 151. No aspiration following *O* and *Mac*, in names, p. 151.
- (III.) Caution as to use of Mod. Irish in determining laws of *anlaut* (not developed by Zeuss), p. 151. Phonetic changes, how produced in syntax, p. 152. (1) Original terminations of the article, in the several cases. Examples, p. 152. Phonetic laws after the article, p. 153. Rule as to Eclipse (O'Donovan), apparently inexplicable, p. 153. Explanation, however, by comparison of O'Donovan's examples from Keating, p. 154. Observations as to confusion of case-endings (p. 78 *et seq.*) completed, p. 154. Peculiar use of acc. for nom. in Old Irish, p. 154. Confusion in the spoken language; (examples), p. 154. The true acc. in the so-called dat. sing., p. 154. Comparison with Mod. Greek, as to loss of dat., p. 155. Example (Table of Declension) of the treatment of the *anlaut* after the article, p. 155. Explanation of so-called Eclipse of *s* after *is* (*in*), p. 156. Of the Adjective after the article, p. 156. (2) Influence of *auslaut* on following *anlaut* between adj. and subst., p. 156. Examples in Zeuss few, p. 156. Examples for the aspiration of the adj., p. 157. Suppression of aspiration in certain cases, p. 157. Transvected nasal, p. 157. Examples for the aspiration of the subst., p. 157. Correspondence with what is known of the Dual: (O'Molloy and O'Donovan), p. 158. Eclipse after numerals, p. 158. (3) Combination between subst. and succeeding genitive much weaker, p. 158. Examples of nasal preserved in acc., p. 158. Other examples, p. 159. (4) Pronouns: (Examples), p. 159. (5) The *anlaut* after prepositions and other particles, p. 160. (6) Action of the verb on the object, p. 161.
- § 6. *Loss of P in Celtic*. Preservation of the guttural in the Gaedhelic (replaced by the labial in the Greek and the Kymric). Examples, p. 161. Primitive *p* replaced even by *c* or *ch*. Examples, p. 161. Aversion to *p* in *anlaut*. Examples, pp. 161-2. Want in the Celtic languages of the prepositions with *p*-*anlaut* in the Sanskrit and other cognate languages, p. 162. Assumption by Pictet and Bopp: (examples). "*Frith*". "*Fir*". p. 162. The Sanskrit "*pra*" and "*pari*", p. 163. The prefix "*ro*", "*ire*", pp. 163-4.
- § 7. *Loss of the P in Celtic (continued)*. Example of loss of *p* in *anlaut* in "*en*" (*avis*), p. 164. Pictet and Pott as to "*are*", p. 164. Prepositions in Old Irish in a double, and even a treble form, p. 164. Examples, p. 165. Fundamental meaning of "*ar*", p. 165.

APPENDIX.

I.—ZEUSS ON THE INFLEXIONS OF NOUNS IN IRISH.

[Translation of the part of Chap. II. of Zeuss' *Grammatica Celtica*, referred to by Dr. Ebel.]

A. *Declension*. Two orders of declension, p. 169.

FIRST ORDER.—The "Vocalic", p. 169.

Declension of Nouns, masc. and neut. Paradigm. I. Series; II. Ser.; III. Ser., p. 170.

Declension of nouns fem. Paradigm. IV. Ser.; V. Ser., p. 170.

I. SERIES. External Inflection; nouns in *-e*, p. 170.

Singular; (examples in all the cases), p. 170. Plural; (examples in all the cases), p. 171.

II. SERIES. Internal Inflection, p. 171.

Singular; (examples), p. 171. Plural; (examples), p. 172.

III. SERIES. External Inflection, except dat. sing., p. 172.

Singular; (examples), p. 173. Plural; (examples), p. 173.

IV. SERIES. External Inflection; fem. nouns in *-e* and *-i*, p. 173.

Singular; (examples), p. 173. Plural; (examples), p. 173.

V. SERIES. External and Internal Inflection; fem. nouns, p. 173.

Singular; (examples), p. 174. Plural; (examples), p. 174.

SECOND ORDER.—The "consonantal", p. 174.

Paradigm of five series; the first three liquid, the last two mute, p. 175.

I. SERIES. Subst. in *-im*, *-in*, taking gen. sing. *-a* or *-e*, etc. Examples, p. 175.

II. SERIES. Nouns taking in oblique cases *-an*, *-in*, and *-in*, *-en*; (two divisions), p. 175. Examples, p. 176.

III. SERIES. Nouns of relationship, masc. and fem. in *-ir*, p. 176. Examples, p. 176.

IV. SERIES. Derivatives in *-id*, declined by variation of internal vowels; (two divisions). Examples, p. 177.

V. SERIES. Contains fem. nouns in *-r*, to which are added the suffixes, *-ach*, *-ich*, *ig*, p. 177. Examples, p. 178.

The Dual Number, p. 177.

Paradigms of the series of the First Order. Examples from the MSS., pp. 178-9.

Anomalous Substantives. Examples, p. 179.

(B) *Diminutives*. Instances from MSS., p. 180.

(C) *Degrees of Comparison*, p. 180.

COMPARATIVE. Two Forms. Examples, pp. 180-181.

SUPERLATIVE. Two endings. (Examples), p. 181.

II. THE CELTIC MSS. UPON WHICH ZEUSS' GRAMMATICA CELTICA WAS FOUNDED; AND THE TABLE OF THE ABBREVIATIONS USED IN REFERRING TO THEM, P. 182.

INDICES VERBORUM TO POSITION OF THE CELTIC.

INDO-EUROPEAN OR PRIMITIVE		<i>Italic and Romance.</i>	
ARYAN.		Latin Index	p. 187
SOUTH ARYAN.		Mediaeval Latin Index	p. 191
Sanskrit Index	p. 185	Picenian	" " "
Old Persian "	"	Sabine	" " "
NORTH-WEST ARYAN.		Oscan	" " "
<i>Hellenic.</i>		Umbrian	" " "
Greek Index	"	Romance	" " 192

Italian Index	p. 192	<i>Windic or Lito-Slavonian.</i>	
Provençal „	„	Old Slavonic	p. 195
French „	„	Polish Index	196
<i>Teutonic.</i>		Servian „	„
Gothic Index	„	Lithuanian Index	„
Old Teutonic „	193	Lettish „	197
Old High German	„	Old Prussian „	„
Middle High German Index	194	<i>Celtic.</i>	
New High German	„	Old Celtic Index	„
Old Saxon	„	Old Irish „	„
Frisian	„	Middle Irish „	204
Low German	„	Modern Irish „	„
Middle Dutch	„	Welsh „	„
Anglo-Saxon	„	Kymric „	208
English	195	Cornish „	„
Old Norse	„	Armoric „	211

CELTIC INDEX TO PHONOLOGY IN IRISH.

Gaulish and Old Celtic		Kymric Index	p. 220
Index	p. 213	Cornish „	„
Irish Index	213	Armoric „	„
Welsh „	220		

CHAPTER I.

ON SIMPLE WORD-FORMATION: ROOTS, STEMS, AND DERIVATIVES.

§. 1. *Of Roots and Root-Forms.*

THE method of investigation employed in the modern science of Comparative Etymology may be described as an analytic process, to which the words of cognate languages are subjected; consisting in successively stripping from them certain letters or syllables which have the symbolical power of expressing the qualities, proportions, or relations in space and time, under which the subject contemplates the object—that is, so much of the phonetic whole constituting the word, as fixes or limits the idea intended to be expressed by it, and makes it the symbol of a definite conception. By this stripping process we obtain a residual syllable or nucleus to which the term Root (French, *Racine*; German, *Wurzel*) is given. A large number of different words in the same language, subjected to this kind of analysis, may leave the same syllable or root; hence we may consider the Root of a series of words as a phonetic symbol of an individual but logically indefinite idea, the limitation or logical definition of the idea being given by the sounds or syllables stripped off. The assumption of such mono-syllabic nuclei in words has given rise to the hypothesis that the formative process or growth of languages was a synthesis, the reverse of our analysis; or, in other terms, that the first symbols of ideas in language were Roots, out of which were elaborated the more developed forms and words.

If we compare the different forms which the same word assumes in the several dialects of a language, we shall find that the difference is due to the substitution of certain letters for others. A similar comparative study of all languages, shows us that they may be grouped into families, the members of each of which may be looked upon as dialects in a wider sense, of some more primitive language. Although at first sight, the permutations, or letter changes from one language to another, appear to be quite arbitrary, they nevertheless take place according to definite laws, which are proper to each language. A very good example of these phonetic laws is afforded by the remarkable permutation or alteration in historical times of the mute consonants in the Teutonic languages (*Lautverschiebung*), schematized by J. Grimm,

according to which these consonants appear, in passing from the Greek or Latin to the Gothic, and thence to the Old High German, to be shifted forward in the direction in which the sounds are naturally developed—that is, the labial, dental, and palatal medials pass into the corresponding tenuous, and the latter into the aspirates—thus the Gr. medial *b* is represented by the Goth. tenuous *p* and by the O. H. G. aspirate *ph* or *f*; the Gr. *p* by Goth. *f* and the O. H. G. *b*, etc.; the Gr. dental medial *d* by the Goth. tenuous *t* and the O. H. G. aspirate *th*; the Gr. medial *g*, by the Goth. tenuous *k*, and the O. H. G. aspirate *ch*, *e.g.*: Gr. *πῶς*, gen. *ποδός*, Goth. *fōtus*, O. H. G. *vuoz*; *δάκρυ*, Goth. *tagr*, O. H. G. *zahar* (the sibilant *z* for the aspirate *th*); Lat. *gelidus*, Goth. *kalds*, O. H. G. *chalt*, etc.¹

By the study of the phonetic laws which govern the permutations or letter changes in each member of a family of languages, we may determine the words in each family which have had a common origin. On analysing these words we obtain a series of residual syllables, which, like the words from which they were obtained, differ from each other, and are nevertheless but forms of the same root. The primitive form of the root could only be found in the mother tongue of the family; but as no monument of this language has been handed down to us, we can only discover this root inductively, by a comparative study of all the languages of the family. What we obtain by the analysis of the words of a language, are not, therefore, properly speaking, roots, but only *Root Forms*. The root forms of the same root may often present so great a dissimilarity, that, without a knowledge of the permutations of the letters, and a comparison of all the forms in a family, we would not suspect any relationship between them. Thus the German word *wer* presents at first sight so little resemblance to the Latin one *quis*, that we could not suppose that they were the same word, or even that they contained the same root; and yet this becomes evident enough by comparing the forms of the word in several languages, which give us the intermediate links, *e.g.*: Skr. *kas*; Gr., *τις*; Lat., *quis*; Goth., *hras*; O. H. G., *huer*; N. H. G., *wer*. The object of comparative etymology is to determine first, the root forms, and then the roots; but it also includes that of the grammatical terminations which are added to the roots. Comparative Etymology may, consequently, be considered as a species of Palaeography which has for its object the determination, from their mutilated relics, of

¹ I do not profess, in this Introduction, to discuss the value of particular laws, my object being merely to explain the nature of Roots, Stems, etc. I have endeavoured to state Grimm's law as simply as possible, but, of course, the form in which I have given it is not wholly unobjectionable; and this the more so, as I am aware that some of the examples do not harmonize with Benary's important law.

the primitive forms of a language,—of that of the parent language of a family of languages,—and, ultimately, of the parent language of all; exactly as the object of Palaeontology is to reconstruct from the bones, shells, etc., the forms which extinct animals had when living.

Leaving out of consideration interjections, we may classify the different kinds of words of which speech is composed according to the following division, which is that usually followed by grammarians:—

CORPORAL WORDS.

FORMATIONAL WORDS.

I. SUBSTANTIVES.

Noun-substantives.

Pronominal substantives (pronouns, *I, thou, he, she, it, who*, etc.)

II. ATTRIBUTIVES.

A. WORDS DEFINING THE SUBJECT—PREDICATE WORDS.

*a. Adjectives.**a. Qualitative adjectives.*

- b. 1 Quantitative adjectives*
(numerals, etc.)
2 Pronominal adjectives
(*mine, thine, this*, etc.)
3 Articles.

*β. Verbs.**a. Concrete verbs (to love).**b. Abstract verbs (to be).*

B. WORDS DEFINING THE PREDICATE—ADVERBS.

a. Qualitative adverbs
(derived from adjectives).*b. Adverbs of time, place,*
number, etc.

III. PARTICLES.

Prepositions.

Conjunctions.

This arrangement renders the distinction between the words which constitute the materials of speech, and those which express the varying relations of space, number, time, etc., very evident. And as the words of each class may be subjected to the process of analysis, we get two kinds of roots, distinguished also as *Corporal*, and *Formal* or *Formational Roots*. As we may get the same root from a noun, an adjective, a verb, or an adverb, a corporal root must be considered to have the embryonic power of a whole sentence; that is, of expressing a whole concrete conception, but without possessing any means of expressing the person, time, etc. Corporal roots may therefore be considered as germs of nouns and verbs, rather than as possessing the explicit power of either.

All languages may be classified into a few classes, according to the manner in which the two kinds of roots are joined to one

another. We may, for example, assume three stages of composition: 1, Parathesis, or the mere juxtaposition of roots; 2, Agglutination, or the adhesion of roots; 3, Amalgamation, or the fusion of roots.

Parathesis. A language at this stage would consist of monosyllabic roots simply, the grammatical relations being expressed by juxtaposition with other roots. The same root, according to its position in a sentence, may perform the function of a noun, an adjective, verb, etc. Pott calls such languages, of which the Chinese affords an example, *Isolating languages*.

Agglutination. In this stage the grammatical relations—mood, tense, person, and class of verbs, number, cases, etc., of nouns, are expressed by affixes to monosyllabic roots, which, though invariable in function, are not inseparable from the root, the several relations being expressed by successively added affixes. In some agglutinating languages all the affixes are suffixes; thus, in the Finno-Tatarian languages, where the root-vowel, itself inflexible, modifies the vowels of the suffixes, giving thereby rise to the so-called vowel harmony. Other agglutinating languages have apparently almost exclusively prefixes, as the Kaffir languages of South Africa. The Semitic languages show a higher stage of agglutination by admitting of prefixes as well as suffixes, the cases of nouns being expressed by prefixing prepositions,² and still more by employing internal vowel changes as means of inflexion.³

Amalgamation. When the corporal and formational elements become so intimately blended that both fuse into an indissoluble unity, the formational elements give rise to true inflexion, which produces a complete logical distinction of the grammatical categories. Languages at this stage are called by Pott, *Amalgamating*.

Bopp's classification is somewhat different. He makes three classes also, the first corresponding to the parathetical; but in the second he includes both agglutinating and amalgamating, and makes of the Semitic languages a third distinct class.

The amalgamating languages are consequently those which have the most perfect organization, and include the Indo-European family of languages, which comprises the Sanskrit, Latin, Greek, Celtic, Slavonian, Gothic, and their modern descendants. In their primitive state such languages cannot contain uninflected roots. In process of time, however, and especially if great per-

² The Arabic, however, has real case terminations.

³ Some examples illustrative of the process of agglutination in the Northern Family of languages may be found at pp. 92 and 94, vol. I., of the ATLANTIS, in the first part of my paper "On the influence which the Physical Geography, the Animal and Vegetable Productions, etc., of different regions exert upon the Languages, Mythology, and early Literature of Mankind, etc."

turbations and mixtures of different peoples take place, the grammatical elements affixed to the roots get shortened, mutilated, or drop off wholly, so that the root is laid bare. In modern languages, as, for example, the English, we find several naked roots, which, however, have the value of the words from which they have been obtained by the gradual wearing off of the clothing; thus the word *hand* is in reality a root-form, having now the full signification of a primitive noun, which in Gothic had the form *handus*.

No matter how great the phonetic modifications which a root may undergo in producing a number of root forms, it preserves its identity. Some philologists, however, admit of exceptions to this rule; that is, they consider that certain phonetic modifications of a root may alter its signification so as to produce a new root. The process by which this is believed to be effected is called *Root Variation*, and may be described as a phonetic change that modifies or tempers more or less the concrete value of the root, without the latter ceasing to be a root. The result of this variation is to produce in the same language, or in cognate branches of the same family of languages, two or more affiliated roots with almost synonymous signification, but differing in a slight degree phonetically. These synonymous roots may appear to have been evolved, as it were, parallel to one another, or the one to be primary, and the other secondary. Of two such synonymous roots we may consider the one which has the greatest phonetic dimensions to be the secondary root. This hypothesis has been so far generalized by some philologists that they believe all roots of considerable phonetic dimensions to be secondary roots, even where we can no longer detect the primitive root. Many, on the other hand, do not admit that such a change can at all take place in a root. Assuming, however, that this kind of variation takes place, it must do so either: 1, by simple modification of one or more letters—vowels or consonants—*e.g.* γλαφ, γλυφ; γραφ, *grab*; or 2, by the addition of a sound or sounds—*e.g.* Skr. *bhā*, to shine, which gives the extended root *bhāsh*, to speak, Gr. φη (φημί), to speak, extended roots φαν, to shine, to speak (φά(ε)ος, πῑφάύσκω), φαν, to shine (φαίνω); Skr. root *ru*, to sound, extended root *rud*, to weep. In the change of the root into a stem, to be described further on, there is no such modification of the root-idea.

§. 2. Of Elementary Word-formation, and Inflection.

Assuming that language was synthetically developed from isolated monosyllabic roots, we have next to consider how words were formed from roots in the Indo-European, or amalgamating

languages, to which family the following pages will exclusively refer. The development of words from roots may be called *Word-formation*, but the elementary words thus formed must undergo further modification, in order to express the varying relations of speech. Thus, a Verb must have special contrivances to express time, person, etc.; and the Noun, number and case, etc. This further modification is called *Inflexion*, or *Word-bending*. The processes by which elementary Word-formation and Inflexion are effected are fundamentally the same; they are—

1. Internal phonetic change, which can only affect the root-vowel, as the change of a consonant would necessarily produce a change in the symbolic value of the root.
2. Addition of phonetic material to the root, which may be of two kinds:
 - a. Such as springs from the root itself; or Duplication.
 - b. Affixes; which may be Prefixes or Suffixes, but especially the latter. These Affixes may be:
 - a. Single sounds or syllables, which only are used as formational elements of words, having by themselves no signification in the fully-formed language, and do not consequently occur isolated in it.
 - β. Affixes which possess of themselves a distinct meaning, and consequently may occur as isolated words in the language.

In the Semitic languages, vowel-change is a predominant mode of word-formation and word-inflexion. In the Indo-European languages it only appears as *Ablaut*;⁴ that is, an interchange in the body of the root of the primitive pure short vowels, *a*, *i*, *u*, but, at a later period, of the newer vowels *e* and *o* also, which were produced by the softening of the primitive vowels. This kind of vocalic change (ablaut) appears to have been a fundamental principle of word-formation in the Teutonic languages.

The vowel change known as *Umlaut* is the change or obscuration of the fundamental root vowels *a*, *o*, *u*, into the impure or obscure vowels, *ä*, *ö*, *ü*, under the regressive assimilating influence of *i* (or *u*) in the syllable immediately following the root. In the Teutonic languages, umlaut by means of *u* only occurs in the Old Norse, in which it has been fully developed; umlaut does

⁴ Wherever special technical terms are invented in any language to express certain definite ideas, they should be retained in translating from that language, if the laws of euphony of the language into which the translation is made at all admit of it. The words *ablaut*, *umlaut*, *vorlaut*, *nachlaut*, *anlaut*, *inlaut*, and *auslaut* are convenient terms, and better than any which could be made out of Greek words. I have consequently used them throughout. *Ablaut*, *umlaut*, *vorlaut*, and *nachlaut* are fully explained where they first occur. *Anlaut* is the initial sound, and *auslaut* is the final sound of a word.

not at all occur in the Gothic. In the Zend umlaut is produced by both the vowels (*i* and *u*), *a* becoming *ai* under the influence of an *i* following, and *au* under the influence of an *u* following. When the *i* is softened to *e*, the umlaut remains as a rule, and even is retained when the *e* is dropt. Umlaut thus apparently acquires the flexional signification of the ending, by the action of which it was produced, and now acts as its substitute, although originally it was a mere phonetic consequence of it. We have a good example of this in the preterite of the conjunctive mood in the O. H. German; the preterite forms of the strong conjugation, which have conditional or potential signification, are characterized by an *i*, *i*. In the M. and N. H. German, this *i* passes into *e*, but leaves evidence of its existence in the umlaut of the root vowel, which now characterizes the conjunctive: O. H. G. Præt. Ind. sing. first, second, and third persons, *las*, *lâsi*, *las*; præt. conj. *lûst*, *lûsis*, *lûsi*; M. H. G., *laese*, *laesest*, *laese*. The following are additional examples of umlaut: O. H. G., *anti* (*enti*), M. H. G., *Ende*; O. H. G., *handi*, *hendi*, N. H. G., *Hände*; O. H. G., *trâki*, N. H. G., *träge*. There is also a phonetic process of regressive assimilation, the reverse of umlaut, and which is called *Breaking*, or *Fracture*, by which *i* is changed into *e*, and *o* into *u*, by the action of an *a* following.

The remarkable law of progressive vocal assimilation already alluded to, and which constitutes so characteristic a feature of the Finno-Tatarian family of languages, may be described as a kind of *progressive umlaut*, which it will be useful to describe, as it will be alluded to hereafter. In the languages of that family the vowels may be divided into three classes: hard, *a*, *o*, *u*, and in some languages, *y*; 2. soft, *ä*, *ö*, *ü*; 3. neutral, *i*, and in some languages, as the Finnish and Samoyede, *e* also. If the root syllable, which is invariable in all the languages of the family, be hard, the vowel of the suffixes cannot be soft; conversely, hard vowels cannot follow soft ones. The vowel *i*, and in Finnish, etc., *e*, also, may be followed either by a hard or soft vowel. The Irish rule of "broad to broad, and slender to slender", may be looked upon as progressive assimilation; the Irish broad vowels being *a*, *o*, *u*, and the slender *e*, *i*. Wherever this rule is followed, a consonant, or consonants, should in every written word lie between either two broad, or two slender vowels; or, in other words, if the vowel of a syllable be broad, the vowel of the next succeeding syllable should be broad; if the vowel be slender, the following one must likewise be slender.

The peculiar weakening of the root vowel which is produced in Latin words by the vowel of a prefix, whether due to composition or reduplication, may likewise be looked upon as a species of pro-

gressive assimilation analogous to that which exists in the Irish. The Finno-Tatarian languages having no prefixes, all progressive assimilation must affect not the root but the endings, hence the difference between this phonetic change in the Latin and the languages in question. The following examples will show the character of the change in the Latin: under the influence of *e*, *i*, and also *o*, *a* becomes *ī* or *e*, *ē* becomes *ī*, *æ* passes into *ī*, *au* sometimes into *ū*, *ō* into *ī*, *ū* into *ē*—*tango*, *tetigi*; *pars*, *expers*; *facio*, *efficio*; *placeo*, *displiceo*; *jacio*, *objicio*; *annus*, *perennis*; *fallo*, *refello*; *carpo*, *decерpo*; *castus*, *incestus*; *ars*, *iners*; *lego*, *diligo*; *rego*, *corrigo*; *quæro*, *inquiro*; *caedo*, *cecidi*; *claudio*, *includo*; *notus* = *gnotus*, *cognitus*; *juro*, *pejero*, etc. There are, however, numerous exceptions, and in compound words formed by prefixed particles or prepositions, such as *circum*, *ante*, *per*, etc., it does not occur. In *ago*, *abigo*, we have a change into *i* produced by *a*.

Phonetic change, by means of affixes, is the great agent in word-forming in the Indo-European languages. The first kind of affixes are those employed in word-formation properly so called, and in inflexion. The second kind of affixes—that is, those which possess of themselves a distinct meaning—are used in making compound words. Some of the first kind of affixes may, however, be distinctly traced to independent words: as examples may be mentioned the personal endings of the verbs, the signs of many of the cases, etc. Thus the ending of the first person in the Sanskrit and Greek was *mi*: *bha-mi*, *tudā-mi*, *dāsyā-mi*; *ἔ-μι*, *φη-μί*, Dor. *φα-μί*; in the Latin the *i* has been lost, and the ending is now only *m*—*su-m*, *inqua-m*, *dicere-m*; this *mi* is the pronominal stem *ma* softened to *mi*, as we actually find it in *mī-li*. The first person plural ending in the Sanskrit is *-mas*, in the Veda dialect, *masi*, in the Doric dialect of the Greek, *μες*: Skr., *bhā-mas*; Dor., *φα-μές*; in the Latin it was *mus*, and in the O.H. German, *mēs*. From the Veda form *masi*, Curtius considers the ending to be made up of the pronominal stems of the first and second pronouns: *ma* + *si* (*si* = *ti*); that is, *I* + *thou* = *we*. Again, the Greek endings, *-σα* and *-σω*, of the 1 Aorist (*ἔγραψα* for *ἔγραψ-σα*), and of the future (*γράψω* for *γράφ-σω*), and of the Latin ending of the perfect, *-si* (*scripsi*), are obtained from the verb, in the Greek *ἔ-μι*, Dor. *ἐ-μί*, Lithuanian *esmi*, root *as*. And lastly, the Latin imperfect, *-bam*, and the future, *-bo*, are derived from the root *fu* (in *fuam*, *fu-turus*, *fu-i*). The English suffixes *-ly*, *-hood*, *-ship*, *-some*, are also good examples, meaning originally *like*, *state* (A. Sax. *hād*), *shape*, *same*. Indeed, the distinction between simple word-formation and composition cannot be always accurately defined; practically, however, it exists in fully formed languages.

If some of the affixes can thus be derived from significant words, it is perfectly reasonable that philologists should endeavour to generalize the fact, and assume as probable that all word-forming and flexional affixes, which possess the symbolic signification of formational words, were originally formed by affixing such words to the word to be grammatically modified. In modern languages where the flexional endings have been worn off, their functions are again performed by words already existing in the language. Such a view naturally leads to the assumption that in the gradual development of languages all word-formation and flexion were synthesis or composition.

The hypothesis that word-formation and flexion were primitively synthesis, and that the phonetic additions by which they are affected were at first independent words, constitutes the basis of what is known as the agglutination theory. This theory is now generally considered to be the correct one. Some philologists seem disposed, however, to modify it so far as to admit two kinds of word-forming and inflexional materials: 1, Simple sounds or syllables, which were never words by themselves, their symbolic power being derived from that which each individual letter is considered inherently to possess; 2, independent words worn out into word-forming and flexional elements.

§. 3. *Of Primary Stem-formation.*

In the foregoing sections three kinds of forms have been mentioned: 1, roots; 2, elementary word-forms; and 3, words clothed with the inflexional elements, which express their relations to each other as members of a sentence. But these do not include every form. The simple word-forms are not as a rule obtained by the direct addition of a grammatical element, derivational or inflexional, to the root. Between the root and the grammatically complete word there lies the *word-stem* (French, *Radical*; German, *Stamm*, and corresponding to the *Crude-form* of some English writers), to which, and not to the root itself, the grammatical elements are added. Stem-formation is, consequently, the first stage of word-formation, a stem is not a root, nor yet a complete word. From the root it is logically distinguished in this, that the unlimited, or, as we might say undulating contents of the root are fixed or solidified, and rendered fit to serve as a symbol of the completely determinate conception represented by the grammatical word. While there are but two classes of Roots, corporal and formational, there may be many kinds of Stems: for example, we may have verbal, nominal, pronominal, and particle Stems—each kind of root branching into many stems, according to the grammatical changes it may undergo. Instead,

then, of three categories of phonetic forms, we have, in reality, four: Roots, Stems, being of a two-fold kind, Simple word-forms or derivatives, and Words clothed with inflexional elements.

Word-formation from roots consists, then, of two distinct processes: 1, the formation of stems from roots, or, *Stem-formation*; and 2, the formation of words from stems, or *Derivation* in its simplest form. Both processes are effected by phonetic means to be hereafter described, but here it may be useful to mention that they cannot always be absolutely distinguished,—the same phonetic change or addition being at one time stem-formation, and at another true derivation. There is, however, an essential difference between stems and derivatives, the basis of the true stem is the root, while the derivative always proceeds from the stem. The two processes are, therefore, logically, even when not phonetically, distinct.

The Phonetic methods of primary or Pure Stem-formation may now be described in detail; they are:—

I. *Modification of root-vowel.*

1. Ablaut proper, which is a very frequent change in the Greek; it is rather an accompaniment than a means of stem-formation. It does not often occur in the Latin, but in the Teutonic languages it is very common, and was apparently the primitive means of stem-formation. Examples: root N.H.G. *brach*, stems *brich*, *bruch*; root $\beta\alpha\lambda$, stems $\beta\sigma\lambda$, $\beta\epsilon\lambda$, verb $\xi\text{-}\beta\alpha\lambda\text{-}\sigma\nu$, nouns $\beta\sigma\lambda\text{-}\acute{\eta}$, $\beta\acute{\epsilon}\lambda\text{-}\sigma\varsigma$ (*tego*, *toga*).
2. Obscuration of the root-vowels *a* and *i* to *e*, and of *u* to *o*. The Greek and Latin have no fraction of *u*, *i* to *o*, *e*, the change is always the inverse. As an example of the breaking of *a* to *e* may be given: root *lag*, stems $\lambda\epsilon\gamma$, *leg*, verbs $\lambda\acute{\epsilon}\gamma\omega$, *lego*; and of *i* to *e*, the Teutonic root LIB, to remain (= $\lambda\iota\pi$), Goth. *liban*, to live = O.H.G. *lebén*.
3. Strengthening of the root-vowel, which may take place:
 - a. By lengthening the short vowel, as: root $\lambda\alpha\theta$, stems $\lambda\eta\theta$, $\lambda\bar{\alpha}\theta$, verbs $\lambda\acute{\eta}\theta\omega$, Dor. $\lambda\bar{\alpha}\theta\omega$, nouns $\lambda\acute{\eta}\theta\eta$, Dor. $\lambda\acute{\alpha}\theta\alpha$.
 - b. Gunation⁵ and Diphthongation—Examples of gunation: root *ι*, stem *ει*, verb $\epsilon\acute{\imath}\mu$; root $\phi\upsilon\gamma$, stem $\phi\epsilon\upsilon\gamma$, verb $\phi\epsilon\acute{\upsilon}\gamma\omega$; in Gothic, root *bug*, stem *baug*; root *vit*, stem *vait*. Examples of Diphthongation: root $\phi\alpha\nu$, stem $\phi\alpha\iota\nu$, verb $\phi\alpha\acute{\imath}\nu\omega$; root $\tau\alpha\nu$, weakened root form $\tau\epsilon\nu$, stem $\tau\epsilon\iota\nu$, verb $\tau\epsilon\iota\nu\omega$; root $\delta\alpha$, stem $\delta\alpha\iota$, verb $\delta\alpha\acute{\imath}\omega$. The latter and similar roots ending in a vowel show the true relation of the *i* to the root-

⁵ The term gunation is applied to the process by which $\acute{e}$ (*ai*) is produced by prefixing $\acute{a}$ to *i* or *ι*, or $\acute{o}$ (*au*) by prefixing $\acute{a}$ to *u* or $\acute{u}$. Diphthongation and gunation are well expressed by the German terms *nachlaut* and *vorlaut*.

vowel in *φαίνω*. Curtius has shown that in the latter the form was *φαν-ι-ω*, a derivational *i* (Sanskrit *ya*), being originally placed after the root, but which by metathesis afterwards entered the root. Gunaion, according to some scholars, does not occur in the Latin, and consequently the derivational *i* retains its place outside the root in the verbs in *io* of the third conjugation, as *capio*, *morior*, etc. This opinion is not, however, strictly correct; for although gunaion may be rare, the following examples show that it does sometimes occur: *foedus* for *foildus* (if we may connect *πέ-ποιθ-α*), root *jil*, *πιθ*, *bi(n)d*; *aurum*, *aurora*, compare *uro*, *us-tum*, Sanskrit root *ush*. The occurrence of this derivational *i* as an element of stem-formation gives rise to a distinct and important class of stems, which will be fully discussed further on in the section on *ya-* or *ia-*stems.

II. Consonantal strengthening of the root.

1. Duplication or doubling of the final consonant.

In the Greek *λλ*, dialectically *ρρ* and *νν*; *σσ* (Bæot.) permutated in the new Attic to *ττ*, root *σπαρ*, *σπερ*, stem *σπερρ*, verb *σπερρω*⁶; root *κταν*, *κτεν*, stem *κτενν*, verb *κτεννω* (Lesbian). In the Latin there is frequent duplication of *l*, root *pal*, *pel*, stem *pell*, verb *pello*, and in the German of *l* and *m*, root *scal*, O.H.G. *scellan*. In the former case it is the result of the assimilation of a derivational *y* by the final consonant.

2. Affixation of a mute consonant foreign to the root. In the Greek and Latin a *τ* is thus affixed frequently, e.g., root *βλαβ*, stem *βλαπτ*, verb *βλάπτω*; root *τυπ*, stem *τυπτ*, verb *τύπτω*; root *pac* or *pec*, stem *pect*, verb *pecto* [the Greek *κτείς* however suggests that the *ct* of *pecto* may be radical]. In the Teutonic languages this process is not now recognizable.

3. Affixation or intercalation of a nasal.

a. Nasalizing an internal vowel. This change is common in the Latin—e.g., root *pag*, stem *pang*, verb *pango*; root *liq*=*λιπ*, stem *linq*, verb *linquo*; root *frag*, stem *frang*, verb *frango*; it also occurs in the Gothic, root *staþ*, inf. *standan*, Engl. *stand*, *stood*.

b. Affixation of the nasal in the auslaut:

a. After vowels. In the Greek we get from *τα*, *γα*, *ταν*, *τεν*, *γεν*. It is sometimes combined with diph-

⁶ Such would have been the Lesbian form, at least; Attic, *σπείρω*.

thongation, as in root βa , stem $\beta a\upsilon\upsilon$, verb $\beta a\acute{\iota}\nu\omega$,
In the Gothic we have *ga* becoming *gang*.

β . After consonants. Only few examples in the Greek;
e.g., root $\tau a\mu$, $\tau e\mu$, stem $\tau e\mu\nu$, verb $\tau \acute{e}\mu\nu\omega$. In the
Latin we have *sterno*, *sperno*, etc.

c. Affixation of a whole syllable, accompanied by nasali-
zation, of which we can only find examples in the
Greek, *e.g.*, νe , νa , root $\delta a\mu$, stem $\delta a\mu\nu a$, verb $\delta a\mu\text{-}\nu \acute{a}\omega$; as $a\nu$, by which the root-vowel becomes likewise
nasalized, root $\lambda a\theta$, stem $\lambda a\nu\theta a\nu$, verb $\lambda a\nu\theta \acute{a}\nu\omega$.

4. Reduplication: root, $\mu\nu a$, reduplicated stem $\mu i\text{-}\mu\nu\eta$, incho-
ative verb $\mu i\text{-}\mu\nu\acute{\eta}\text{-}\sigma\kappa\text{-}\omega$. Lat. root *min*, *men*=Skr.
man= $\mu\nu a$? stem *me-min*, verb *memini*.

All the more important methods of primary or pure stem-for-
mation are embraced under the preceding categories. There
are also a few exceptional cases, such as where an intensive *s* is
introduced into the root, *e.g.*, root $\mu i\gamma$, stem $\mu i\sigma\gamma$, verb $\mu \acute{\iota}\sigma\gamma\omega$;
Latin, *misceo* (compare Ir. *cummasc*, commixtio), which must not
be confounded with the derivational *sc* of inchoative verbs. Be-
sides primary or pure stems, there are, however, other classes of
stems which are formed by the addition of a vowel, or of a
syllable ending with a consonant, and which will be described
hereafter. It may be well to observe here, that the circum-
stance of stems being formed by the addition of a whole syllable,
the introduction of an intensive *s* into the body of the root, etc.,
shows us how cautious we should be in concluding that stem-
forms, which at first sight appear extremely simple, are the roots
themselves. For example, $\phi a\nu$ and $\kappa\rho i\nu$, although apparently
forms of very moderate phonetic dimensions, have been, in
reality, enlarged from ϕa and $\kappa\rho i$. Then again, it is necessary
to be careful to distinguish between the stem and the pure words
or stem-words. For example, $\xi\pi o\varsigma$ and *corpus* are true stems,
as is shown by attaching flexional elements to them; thus, $\xi\pi e\sigma\text{-}\omega\varsigma$
contracted to $\xi\pi e o\varsigma$, *corpus-is* softened to *corpor-is*. On the
other hand, $\phi i\lambda \acute{\epsilon}(\omega)$, $\lambda \acute{o}\gamma o(\varsigma)$, *fructu(s)*, are full words, contain-
ing the derivational elements, ω , ς , *s*, respectively.

§. 4. Of Noun-formation, and Derivative Stems.

The formation of stems may be considered the first separation
of words into grammatical categories, but it does not complete it;
for although some stems are essentially verbal, and others nomi-
nal, there are many which admit of being made the basis either
of verbs or of nouns. The complete separation is only effected
when one of the signs which characterize the complete word is

affixed to the stem. These grammatical signs are the derivational and inflexional elements.

The characteristic signs by which the stem becomes a verb, are the personal endings μ , σ , τ ; m , s , t , etc.: root ι , stem $\epsilon\iota$, verb $\epsilon\tilde{\iota}\mu$,— μ being the personal ending for the first person sing. ind.; Skr. root *tud*, stem *tuda*, verb *tuda-si*,—*si* being the ending of the second person sing. ind. As Dr. Ebel's paper does not deal with the verb, I shall confine myself exclusively to nouns. The characteristic signs by which nouns are formed are the gender and case endings. The vocative, from its nature, ought to present us with the pure nominal stem, but in the actual language this is not generally the case; and hence it is found more convenient to assume the nominative as the basis of analysis.

One of the most characteristic distinctions between objects is that which life affords, and accordingly the sign, by the affixation of which to the stem the nominative form of the noun is produced, is a gender sign. For living objects, the sign primitively affixed to noun-stems in the Indo-European languages was s . Some scholars hold that neuter nouns were distinguished by t , which they consider possesses a certain power of symbolizing lifeless or inert bodies. But the evidence that t was ever used, except in pronominal declension, as a sign of the neuter gender, is very doubtful. The Gothic neut. adjective-ending *ata* is, according to Bopp, merely a suffixed pronoun. Mankind has, however, at all times, figuratively endowed certain lifeless objects with life, and abstract conceptions, such as justice, virtue, etc., are expressed by words of masculine or feminine gender, according as our fancy chooses to consider them of the one or other sex; the names which are used to symbolize these objects or abstract conceptions take, accordingly, the sign of living objects.

The nominative sign s has, however, been but imperfectly preserved; in the Sanskrit it is usually softened to h ; the feminine forms, which incline to vocalic auslaut with long vowels, seem to have thrown it off, apparently with the object of marking the distinction of the sexes. This tendency to have vocalic auslaut is well shown in the adjectives having the endings in the Sanskrit, *as*, *á*, *am*; in the Greek, $\alpha\varsigma$, α (η), $\alpha\nu$. Even masculine forms often lose the s . In the Zend and Lat. it is frequently dropped altogether. In the Gothic it is generally only preserved in masculine substantives with vocalic stems, and in masculine adjectives and pronouns. In the O.H.G. the substantives have altogether lost it, while in adjectives and pronouns it has become r .

The neutral t of the pronominal forms has to a great extent been lost. In the Greek it does not occur at all; in the Latin it has

become *d*: *id*, *illud*, *quid*, etc. In the Gothic it occurs in the pronouns *is*, *si*, *ita*; English *he*, *she*, *it*; Old Irish *é*, *sí*, *ed*; Gothic *sa*, *so*, *thata*, Anglo-Saxon *se*, *seó*, *thāt* = Greek *ὁ, ἡ, τό* for *τοτ* = Sanskrit *tat*. In the O. H. German it becomes *z*: Gothic third person of the pronoun masc. *is*, neuter *ita* = O. H. German masc. *ir* sometimes *er*, neuter *iz*, sometimes *ez*. In the Gothic *blindata*, *gódata*, O. H. German *plintaz*, *quotaz*, M. H. German *blindez*, *quotez*, the ending *ata*, as above observed, is a suffixed pronoun, and cannot consequently be considered as a proof that *t* was the sign of the neuter, in other than the pronominal declension. In many cases the neutral *t* has been replaced by *m* or *n*, which, however, belonged originally to the accusative singular.

The grammatical signs or endings cannot always be directly affixed to stems; this is especially the case with those beginning with a consonant, and where the stem ends consonantly. If in such cases the ending were affixed directly, the final stem-consonant would be rendered liable to change, and the modification may proceed so far as to render the stem unrecognizable. Therefore a vowel is introduced between the stem and the ending, which originally had a mere phonetic function, and possessed no etymological or grammatical signification. The vowel by itself is always short, and consequently very changeable. It is often an extremely difficult problem to distinguish between the vowel thus added and a derivational vowel, and therefore between a derivational and stem-form. It is also an important one: for this vowel, though originally having no stem-forming or derivational character, has gradually come to be looked upon as an integral part of the stem-ending, and has even penetrated where it was not absolutely required.⁷ It will be useful to call this stem-forming vowel in nominal stems the *Declension Vowel*, in order to distinguish it from a second vowel which is sometimes used as a mere copulative in the oblique cases, and which is never an integral part of the stem-ending. A similar stem-forming vowel is found in verbal stems.

Forms which must be looked upon as true stems are, however,

⁷ In Finnish nearly all the stems are two-syllabled. The first or root syllable is accentuated, the second has a short vowel auslaut. This short vowel, unlike the root-vowel, which is invariable, sounds differently according as the stem is pronominal or verbal. It is a mere rhythmical addition to the root which sometimes acquires the signification of a derivational suffix, and has consequently a striking analogy to the declension vowel of the Indo-European languages, and makes Finnish stems appear very much like those in the Gothic, which will be described further on as vocalic middle forms. The affixation of this vowel is the only mode of stem-formation in the Finnish; in Hungarian it has been to a great extent obliterated. It would be extremely interesting to trace this rhythmical stem-forming vowel through the whole Finno-Tatarian Family. Here however, it would be out of place to dwell further on the analogy.

sometimes made by the addition of a whole syllable, the consonant forming the auslaut, taking the place of the declension vowel. The forms produced in this way approach nearer to the character of derivatives than those obtained by the mere addition of the declension vowel,—indeed many of them have the character of true derivatives.

In the Greek nouns in $\tau\eta\varsigma$, we have a perfectly analogous class of stems formed by the addition of a syllable ending vocally instead of consonantly; they are, however, in part undoubted derivatives formed by affixing the derivational suffix $\tau\eta$ to an already fully formed stem. We may call all such stems, formed by the addition of a syllable to verbal or nominal stems, which thus perform, as it were, the function of roots, *Derivative Stems*, and treat of them as a distinct class of vocalic or consonantal stems, according as the suffix ends in a vowel or a consonant. But as there is a real logical distinction between the true stems which start from the root, and these pseudo-stems which are derivatives of true stems, it will be better not to consider such pseudo-stems under the head of stems, but to refer all of them to the category of derivatives.

We have accordingly three distinct classes of true nominal stems as regards their relations to the grammatical endings:—1, primary or pure stems, to which the nominative *s* is directly affixed; 2, stems which require a vowel between them and the ending; and 3, stems formed by the addition of a syllable ending in a consonant in place of a vowel. The second and third classes may be called secondary stems or, better still, middle forms, that is, intermediate between pure stems and true derivatives. Of the pure stems some have vocalic and some consonantal auslaut. The middle forms, produced by affixing a declension vowel, may all be looked upon as vocalic ending stems, while the middle forms, which result from affixing a consonantal ending syllable, are consonantal stems.

The following table, to which I have likewise added the derivative stems, will render the classification of stems above given more intelligible:—

I. TRUE STEMS FORMED FROM THE ROOT.

Vocalic Stems.

1. Pure Stems.
2. Middle Forms produced by:
 - a. affixing the declension vowels,
a. *i*, *u*.
 - b. *ya*-stems, or, *a*-stems, with an
intercalated *i* (*y*) before the de-
clension vowel.

Consonantal Stems.

1. Pure Stems.
2. Middle forms or stems produced
by affixing a syllable ending
consonantly to the root.

II. PSEUDO, OR DERIVATIVE STEMS.

- | | |
|--|--|
| 3. Stems formed by the addition of a derivational suffix ending in a vowel, to an already fully-formed stem. | 3. Stems formed by the addition of a derivational suffix, ending consonantly, to an already fully-formed stem. |
|--|--|

§. 5. Of Vocalic Stems.

PURE STEMS. All monosyllabic nouns may, strictly speaking, be considered to be pure stem-words, in which the nominal sign is directly affixed to the stem without any intervening phonetic material. Such nouns occur in the Greek and Latin, though they are not numerous.

GREEK: root *κί*, stem *κῑ*, noun *κί-ς* (masc. gen. *κί-ός*), *γρᾱῦς* (*γρᾱ-ός*); *δρῡς*, *θῶς* (roots *δρῡ*, *θῶ*, stems *δρῡ*, *θῶ*) possess still more of the character of pure stems. Some forms usually included under this category are undoubtedly not primitive pure vocalic stems; for example, *βοῦς* may perhaps be more properly reckoned among the consonantal stems, as it stands for *βοῦ-ς* (root *bo*).

LATIN. In the Latin there are extremely few forms which can be considered, strictly speaking, as pure vocalic stems. Perhaps the only form is *grus*, stem *gru*, for it is doubtful whether the *r* in the plural *vī-r-es* of *vīs* (stem *vīr*?),—and in the old form of the genitive *sueris* (*su-er-is*) of *sus*, Sanskrit, *sû-kara*,—be not organic instead of being, as is generally supposed, merely euphonic.

GOthic. In the Gothic a number of such monosyllabic words, belonging to what is called the strong declension, is to be found; in the masculine and feminine they have the nominative sign *s*, while in the neuter no suffix can be found, and the stem accordingly occurs in its naked form, *e.g.*: masc. *fisk-s*, *dag-s*, *balg-s*; fem. *anst-s*; and neut. *leik*. These nouns correspond with the Greek nouns derived from consonantal stems: *θρίξ*, *αἶξ*, *πῦρ*, and the Latin nouns *urb-s*, *pon-s*, *mel*. In the nominative case, the analogy is complete; but if we compare them through all their cases, we shall find that in the Greek and Latin the nouns of this kind affix the case-endings to the stem in exactly the same way throughout, namely, its nominative directly, and the others by means of a copulative vowel, which is the same in all the cases, while the Gothic nouns take different vowels in the plural. For example:

Nom. and Voc.	.	.	fiskô-s	balge-is
Gen.	.	.	fiskê	balge
Dat.	.	.	fiska-m	balgi-m
Acc.	.	.	fiska-ns	balgi-ns.

It would appear from this, that the Gothic nouns under consideration are only relics of more primitive forms, still preserved

in the plural, but blotted out in the singular. According to this view, all the nominal stems must have been clothed with a vocalic auslaut, which was either *a* or *i*, and called by Grimm the *Declension Vowels*, a term which I have extended above to the corresponding vowels of the vocalic middle forms in the Greek and Latin. The primitive form of *fisk-s* must therefore have been *fiska-s*, and of *balg-s*, *balgi-s*—forms which approach very close to the Latin, as may be seen by comparing the primitive form of *gast-s*, *gasti-s* = Latin, *hosti-s*. The view just put forward is supported by the circumstance that there exists a class of nouns, in which the clothing or declension vowel of the stem is *u*, that are not syncopated like those with the vowels *a* and *i*. Although at first sight the Teutonic languages appear to contain the largest number of pure stems, the preceding considerations apparently show that there are no pure nominal stems in those languages. On this account I will include the whole of those Gothic nouns under the middle forms with vocalic auslaut.

MIDDLE FORMS ENDING VOCALLY. The term middle form implies that we have passed beyond the stem, but have not yet arrived at a true derivative. The nouns derived from those middle forms have the same analogy to those obtained from pure stems, that the Greek verbs in *άω*, *έω*, *ίω*, etc.—as *τιμάω*, *φιλέω*, *μεθύω*,—have to some of those in *μ*,—as *εἰμύ*, *φημί*, etc. The nominal middle forms have, however, much less of a derivational character than the verbs above named; so that, while always bearing their mode of genesis in mind, we may consider them as vocalic stems.

As the primitive vowels were *a*, *i*, *u*,—*e* and *o* having been formed later,—the primitive stem-forming vowels must have been also *a*, *i*, *u*. To these were added at later language-periods *e* and *o*,—*ē* being formed by the softening of *ā*, *e* of *i*, and *o* of *a*. There is also a secondary *u* produced from *a*, which must not be confounded with the primitive *u*. We may consequently include all vocalic stems under *a*-stems, *i*-stems, and *u*-stems.

I-STEMS.—*I*-stems approach closest to the character of pure stems. In the Latin the *i* often becomes *e*; in the Greek it sometimes becomes in the oblique cases *ε*.

GREEK.—The masculines and feminines of the third declension in *-ις*, gen. *-ιος*, *-εως*, belong to the *i*-stems; e.g., *φύσις* (*-εος*) *πόλις*. There are no neuter nouns in *i*. The adjectives like *ἴδρις*, *ἴδρι* are of this class.

LATIN.—The masculines and feminines of the third declension in *is*, and the feminines in *ēs*, which do not take an augmenting syllable in the genitive, belong to the *i*-stems, as, *hosti-s*, *civi-s*, *aede-s*; the *i* being changed in the latter into the long *e* charac-

teristic of feminines. In neuters the *i* is changed into *ē*, but in the plural the *i* again appears: *mar-ē*, *mar-i-s*, *mar-i-a*. The stems, *brevi*, *dulci*, *levi*, of the adjectives, *brevis*, *dulcis*, *levis*, belong to this category.

GOthic.—Among the Gothic *i*-stems which correspond to the, preceding, may be mentioned the primitive forms: masc., *gastis*, *gardis*, *balgis*, existing in the Gothic, in the syncopated forms: *gasts*, *gards*, *balgs*, but showing traces of the vocalic clothing of the stem in the plural: nom., *gasteis*, *gardeis*, *balgeis*; fem., *dēdis*, *vaurtis*, syncopated in the Gothic to *dēds*, *vaurts*; nom. plur., *dēdeis*, *vaurteis*. It will be seen from the preceding, that the feminines also retain the nominative sign *s*, the feminine form appearing to be marked by a gunation of the vowels of the endings in the genitive and dative singular, thus:

			Masc.	Fem.
Nom.	.	.	gast-s	ded-s
Gen.	.	.	gast-is	ded-ais
Dat.	.	.	gast-a	ded-ai

As in the Greek there are no neuters formed from *i*-stems.

In addition to the feminines above discussed, and all of which belong to the strong declension, there is another peculiar class of *i*-stems belonging to feminine nouns of the weak declension, such as *managei*, gen. *manageins*, which will be better understood when I treat of the *a*-stems.

Adjectives derived directly from stems, and not through other forms, although differing essentially from substantives in their flexion, exhibited primitively the same distinction of stems into *a*-, *i*-, and *u*-stems, corresponding to the Greek adjectives in *ος*, *α*, *ον*, and *υς*, *εα*, *υ*; and to the Latin in *us*, *a*, *um*, and in *is*, *e*. But the primitive distinction is very much obscured in the Gothic, in which, with the exception of traces, the *i*-stems have wholly died out, while only a few of the *u*-stems remain; and even these pass in the oblique cases into the *a*-stems, with the addition of a derivational *i* (see the discussion of this subject under the head *a*-stems), so that the primitive character of the stem is only recognizable in the nominative. In the Gothic adjective there are consequently only *a*- and *u*-stems to be distinguished.

A-STEMS.—GREEK AND LATIN.—The *a*-stems in the Greek and Latin admit of being divided into two classes:—

1. Stems in which the primitive *a* has been preserved unchanged, or changed into *ē*, and which may be subdivided into:

α. Stems with primitive short *a*.

β. Stems with *ā* or *ē*.

2. Stems in which the primitive *a* has been changed into *o* in the Greek, and into *u* in the Latin.

A-stems with primitive short a. In the Greek the masculines of the first declension in *-ας, -ης* are referred to this class, *e.g.*, *βορέας, ἑρμείας* contracted to *ἑρμῆς*; the nominative *ς* is retained, but the vowel is inorganically lengthened. In the Latin, also, only the masculines of the first declension, which, like the feminines of the same declension, have lost the nominative *s*, belong to this category, as, *scriba, agri-cola*, etc. Pott considers the long vowel as the result of contraction. It is probable that all the words belonging to this form are, in reality, derivatives in the second degree from nominal and verbal stems, that is, they contain, besides the nominative *s*, a second derivational element, which may still be recognized in the Greek nouns in *της*, as, *πολίτης*, etc., in which the derivational suffix is the syllable *τη*, as has been already pointed out in discussing the different classes of stems at p. 17.

A-stems with ā or ē. As was stated above, feminine nouns prefer long vowels and vocalic auslaut; accordingly we find that this class includes the feminines of the first declension in the Greek and Latin, all of which have no nominative *s*. In the Latin the *ā* is invariably shortened, but in the Greek it is partly retained, or changed into *η* and partly into *ᾱ*, *e.g.*, *χώρᾱ, δίκη, σφῦρᾱ*. While the vocative of the *a*-stems, with primitive short *a*, appears as a rule with the organic short *a*, that of the stems with *ā* or *ē* is the same as the nominative, and consequently sometimes has an inorganic short *a* whenever the nominative has one. The primitive long vowel has been preserved in the form *ē*, and likewise the nominative *s*, even in the vocative, in the nouns from stems of this class, which belong to the Latin fifth declension, which is but an older form of the first, *e.g.*, *di-e-s, fid-e-s*. Here also we meet with forms which appear to belong to the class of vocalic stems obtained by means of a derivational syllable-suffix, as described above, the analogy being strongly supported by their admitting of being declined either according to the first or fifth declension, *e.g.*, *materies* or *materia, canities* or *canitia*.

A-stems, in which the primitive a has been changed in the Greek into o, and in the Latin into u. This change occurs in the words of the second declension in *ος, ον*, and *us, um*; those in *ος* and *us* are, as a rule, masculine (as in the Sanskrit is always masculine); there are some, however, exceptionally feminine, as *ἡ τάρφος, fagus*, etc. The vocative shortens *o, u*, to *ῶ, ŭ*, has organically no nominative *s*, and in the neuter is the same as in the nominative. To this category belong the Greek adjectives in *ος, α (η), ον*, and the Latin ones in *us, ū, um*. From this it will be seen that the vowel is shortened in the feminine in the

Latin, but not in the Greek; but, on the other hand, some Greek adjectives of this category do not distinguish the feminine at all.

GOthic.—To the Gothic *a*-stems belong the masculine, feminine, and neuter forms corresponding to the Greek forms in *ος, α, ον*, and the Latin ones in *us, a, um*, discussed above, and to the Sanskrit in *as, â, am*. For example: masc. *dags, fisks*, etc., which are syncopated forms from *dagas, fiskas*, etc., as I have already fully described, nom. plur. *dagôs, fiskôs*, etc.; fem. *giba, bida*, etc., nom. plur. *gibôs, bidôs*, etc.; neuter, *vaurd, leik*, etc.; nom. plur. *vaurda*, etc. The masculines have lost the *a* in the singular, but retained it in the form of *o* in the nominative plural, *e* in the genitive, and *a* in the dative and accusative (see declension of *fisks*, pp. 18, 25); the feminines have retained the *a* in the oblique cases as *a* or *o*, but have no nominative *s*. The neuter form has lost the *a* in the singular as well as the neuter nominative sign, if it ever had such:—the full form of the nominative singular of *vaurd*, for instance, should have been *vaurdat*, if we admit *t* to be the neutral sign of nouns, more probably it was *vaurdam* = Latin *verbum*; it has retained it in the plural *vaurda*.

I have already spoken of the Gothic adjectives, and here it is only necessary to add that, although the distinction between the clothing vowels of the stems was earlier obscured, and to a greater extent in the case of the adjectives than in that of the substantives, the signs of the genders have been much better preserved. Indeed, in the latter respect the Gothic adjectives belonging to the *a*-stems have endings of a much more primitive form than either the Greek or the Latin, or even than the Sanskrit.⁸ These endings are *s, a, ata*, or, in the primitive form, *s, a, t*, as for example:—

	<i>Masc.</i>	<i>Fem.</i>	<i>Neut.</i>
Primitive organic form . . .	blind-a-s	blind-a	blind-a-t
Syncopated Gothic form . . .	blind -s	blind-a	blind-a-ta

YA- (YÂ-) OR IA-STEMS.—Besides the primitive *a*-stems, above described, there exists another class of stems, which, as they do not give rise to any essentially peculiar flexion, may be considered as a class of secondary forms of the simple *a*-stems. They are formed by the intercalation of an *i* (*y*) between the stem and the declension-vowel, and may accordingly be distinguished as *ya-* (*yâ-*) stems.⁹ In the Gothic the stems of this class are usually considered to be middle-forms, properly so called, the Gothic *a*-stems being reckoned as pure stems. I

⁸ On the assumption that *t* was the primitive neuter gender sign, which is not, however, generally admitted. Bopp considers the ending *-ata* to be a suffixed pronoun. See § 4, p. 15.

⁹ *Ya-* masculine and neuter; *Yâ-* feminine.

think I was justified, however, in classing them along with the middle forms of the Greek and the Latin, and, this being so, in considering that the *ya-* (*yá-*) stems approached still nearer to true derivational forms than any of those yet mentioned.

The Greek and Latin forms which come under this category, are the substantives and adjectives in *ιος, ia, ιον, ius, ia, ium*—*e. g.*, *κύριος, ἴδιος; filius, medius, media, medium*.

As the only forms of this kind referred to in Dr. Ebel's paper are Gothic, and as the object of this sketch is merely intended to elucidate that paper, I will not further consider the Greek and Latin *ia-* (*iá-*) stems [*ya-* (*yá-*) stems], and will accordingly confine myself to a few observations upon the Gothic ones.

In the Gothic the intercalated *y* is firmly retained before the endings through all the cases, *e. g.*: *haryis* instead of *hari-s* (the primitive organic form of which would be *haria-s*); gen. *haryis*; dat. *harya*, etc. In the Old High German the nom. sing. alone retains it. If the stem-syllable be long, or ends in two consonants, *yi* changes into *ei*: Goth. *hairdeis* instead of *hairdi-s* (the primitive form of which would be *hairdia-s*); O. H. G. *hirti*, gen. *hirtes*; M. H. G. *hirte*, gen. *hirtes*. In the Modern High German it passes into the weak declension: *der hirt*, *des hirten*. Some of the feminines of this category retain the full organic form, such as *vrakya, brakya*; and in some the *i* is even preserved in the Old High German as *y* or *e*, as for example, *suntya*; while other words throw off the *a*, *e. g.*, Goth.—*bandi, kunthi*, instead of *bandya, kunthya*.

The distinction between the *a* and the *ya*-stems disappears in the masculines and feminines when the *a* and *i* of the Old High German are softened into *e*,—the two forms then coinciding; the existence of such a distinction being only betrayed by the umlaut of the stem-vowel in the *ya* series. The same observation applies to the neuters, one example of which will suffice to show their forms, *e. g.*: Goth. *kuni*, gen. *kunysis*, instead of the full organic form *kunya-t*, or *kunya-m*, or *kuny-a*; O. H. G. *chunn-i*, gen. *chunn-es*, the *i* being dropped, as was already noticed in the case of the masculines, in all the cases except the nom. sing. In the Middle High German the *i* becomes *e* as in the other genders: *künne*, in which the umlaut of the stem-vowel betrays the *ya*-stem. In N. H. G. frequently even the final *e* is dropped, as, Goth. *badi* (from **badya*), O. H. G. *beti*, M. H. G. *bette*, N. H. G. *bett*, Engl. *bed*.

The adjective forms of the *ya*-stems are exactly analogous to the substantives. In the Middle and New High German the character of the stem is betrayed only by the umlaut. The striking analogy between some of the Gothic and Latin adjective forms

of the *ya*-stems, is well shown by the following comparison: Lat.—*medius, media, medium* = Goth.—*midis, midya, midyata*.

CONSONANTAL STEMS CHANGED INTO VOCALIC (A- AND I-) STEMS.—Some Latin *n*-stems drop the *n* in the nom. sing., *e.g.*: in *ōn*,—*homo, ordo, margo*, of which the full forms with the nominative *s* should be, *homon-s, ordon-s, margon-s*; in *ōn*,—*leo, latro, carbo*, the full forms of which should be, *leon-s, latron-s, carbon-s*; the feminine verbal nouns in *io*, which is obviously *ion*, with the *n* dropped—*actio, ratio, statio*, etc., the full forms of which should be, *action-s, ration-s, station-s*. These nouns give us in the inorganic form of their nom. sing. apparent vocalic stems. A comparison between the full organic forms of the verbal nouns, which are undoubted derivatives in the second degree, and those of the other examples given above, affords strong grounds for believing that the latter also are derivational forms of the second degree. Except in not having a final *n* in the nom. sing., these nouns are perfectly analogous, in all the other cases, to the Latin nouns in *in*, especially to those in which the *i* is softened to *e* in the nom. sing., *e.g.*, *pecten*, etc.; and the verbal nouns *flumen, tegmen, lumen, carmen*, etc., and may be compared with the Greek ἀκτίς, gen. ἀκτῖνος; λιμήν, gen. λιμένος; ἀηδών, gen. ἀηδόνης; εἰκὼν, gen. εἰκόνης; λειμὼν, gen. λειμῶνος.

There is a class of Greek nouns, chiefly feminine, which at first sight appear to form their stems in *ω*, and which, as a rule, do not take the nominative *s*, *e.g.*: ἡ πιθώ, gen. πιθόος, the *ω* being shortened to *ο*; ἡ ἡχώ, gen. ἡχόος, etc. Some are, however, formed with the *ς*, as ἡ αἰδώς, gen. αἰδόος, the *ω* being shortened; ἡ ῥως, gen. ῥωος, etc., without the shortening of the *ω*. According to Curtius, all these forms are the relics of mutilated *n*-stems.¹⁰ There is an obvious difference, however, between them and the Latin forms *homo*, etc., with which, if this hypothesis be correct, they would connect themselves, namely, that the *n* appears regularly in the oblique cases of all the Latin nouns, not only of those ending vocally in the nominative, but even of those which take the nominative *s*, as *sanguis*, which is evidently for *sanguin-s*.

In the Gothic, a class of nouns with vocalic auslaut is also found, which exhibit a remarkable analogy with the Latin nouns just discussed; for example, *guma*, Eng. *g(r)oom*, gen. *gumins*, which may be equated with the Latin *homo*, gen. *hominis*; *rathyô*, gen. *rathyôns*, with the Latin *ratio*, gen. *rationis*; *namô*, gen. *namins*;

¹⁰ This hypothesis of Curtius, by which *ω, ως, ας, ατ*, are considered to be= *αν*, is, to say the least, extremely improbable. Ahrens is more likely right in regarding αἰδώς, etc., as original *â*-stems, to which a *y* (*i*) is superadded.

nom. plur. *namna*, with the Latin *nomen*, gen. *nominis*; nom. plur. *nomina*. The reasonable conclusion from this is, that these vocalic forms are in reality consonantal *n*-stems, having more or less of a true derivational character. According to this hypothesis, their full nominative forms should be, *guman-s*, *rathyôn-s*. This hypothesis receives considerable support from the fact that several of those forms have again taken up *n* in the Modern High German, *e. g.*:

Gothic.	Old High German.	Middle High German.	Modern High German.
	bogo,	boge,	bogen.
	grabo, krapo, . .	grabe,	graben.
garda, . .	garto,	garte,	garten. ¹¹
namô, . .	namo,	name,	{name and also namen.

Probably all the foregoing examples may be referred to *n*-stems; but there is likewise a class of feminine nouns, which, considering them as vocalic stems, may be classed as *i*-stems, and which in the Gothic end in the diphthong *ei*, *e. g.*: *audagei*, *managei*, gen. *manageins*, etc.; they present the same peculiarities of inflexion as the others above mentioned, as will be shown further on. In this case also we are led to the conclusion that they are *n*-stems which have thrown off the *n*, not only by the analogy of inflexion, but also by the fact that the greater part of this class of nouns take up an *n* in the nominative in the O. H. German; we thus get, along with *manikî*, *manakin*, while in the N. H. German we have *menge*, unlike the *a*-stems. So also O. H. G. *ôdhîn* and *odi*, N. H. G. *oede*, O. H. G. *sterchîn*, N. H. G. *stürke*.

The dropping of the *n* does not, as has been already remarked, affect the declension of the Latin or Greek nouns; but it is not so in the Germanic languages, where a peculiar declension has been developed, known as the weak declension, in contradistinction to the strong or true declension of words like *fisks*, *days*, etc. The difference will be better understood by the following comparison:

Strong: Nom. sing. *fisks*; gen. *fiskis*; dat. *fiska*; acc. *fisk*; plur. nom. *fiskôs*.
Weak: " *hana*; " *hanins*; " *hanin*; " *hanan*; " *hanans*.

All the nouns of the class we have been here considering

¹¹ Besides *garda*, there is also in the Gothic the word *gards* (plural *gardeis*)=house, family, etc.; but evidently having the meaning of garden also, as is proved by *veingards*=vineyard; *aurtigards*=orchard. The German *garten*=English *garden*, could not, however, be obtained from it; but, on the other hand, the English *yard* (as in court-yard) is derived from it.

belong to the weak declension, the great peculiarity of which is the addition of an *n* to all the endings of the cases, except the nominative singular and dative plural. It belongs to adjectives as well as to substantives, but while the latter decline exclusively strong or weak, adjectives may be declined according to either declension. The weak adjective declension corresponds with that of the substantive; its chief peculiarity is that of having in the nominative singular vocalic auslaut in all three genders, *e. g.*:

Gothic.	{ Masc.	fem.	neut.
	{ blinda,	blindô,	blindô.

The same vowels characterise the genders of the substantive, *e. g.*: masc. *hana*; fem. *tuggô*; neut. *hairto*. In the Old High German the masculine *a* and the feminine *ô* change to *o* and *a*. In Middle and New High German both the *a* and *o* become *e*, so that all genders end alike. This change is not, however, confined to the vowels; for although in the Gothic the case-endings are not affected by the addition of the *n*, the genitive *s* is dropped in Old High German, and *hanins* becomes *hanin*. In the Middle High German, the uniform ending *en* took the place of all the various endings, both singular and plural, with the exception of the nominative singular.

The existence of the *s* in such Latin forms as *sanguis* (for *sanguin-s*), which belong to the same class as *ratio*, *nomen*, etc., justify, as I think, the additions of that nominative sign, in reconstructing the full organic nominative forms of those and similar nouns. For its addition in the analogous German nouns, I have the great authority of J. Grimm; but Bopp's discovery that the primitive nominative sign in the Indo-European language was *s*, places the matter beyond doubt. It is right, however, to state that some philologists, amongst others Heyse, consider that the full organic forms never had *s*. A full discussion of this point, however important, is incompatible with the limits of our space, and would be in other respects foreign to the specific objects for which this introduction has been written.

U-STEMS.—GREEK. Under this head come the Greek words in ὅς of the third declension, which retain the *υ* in the oblique cases, *e. g.*: nom. ὁ ἰχθύς, voc. ἰχθύ, gen. ἰχθύος, etc., neut. ἄστυ.

LATIN. The Latin *u*-stems belong exclusively to the words declined according to the fourth declension, such as those in *ūs*: they are chiefly masculine, but also exceptionally feminine, *e. g.*, *manus*, *socrus*, etc.; verbal nouns in *tus*, which may be considered to be true derivatives in the second stage, and to which the observations made at p. 17 respecting derivative stems consequently apply, *e. g.*, *ductus*; neuters in *ñ*, *e. g.*, *cornu*. The nouns

of the second declension, which appear to contain *u*-stems, are *a*-stems, the *a* having been replaced by *u*. This secondary *u* is much more unstable than the primitive *u* of the fourth declension, which is never suppressed by the vowel of the ending, but, on the contrary, absorbs the latter in the genitive singular and nominative and accusative plural, *e.g.*, *fructûs*, instead of *fructuis*, *fructues*. It has not wholly resisted modification, however, having been, in most cases, softened into *i* in the dative and ablative plural, *e.g.*, from the older *fructubus*, has come *fructibus*; in others, however, it has remained unchanged, as in *acubus*, *lacubus*. The whole declension may be considered as a contracted secondary form of the third declension.

GOthic. The Gothic words founded on *u*-stems correspond exactly with the Greek words in *υς* of the third declension, and the Latin ones in *us* and *u* of the fourth. Unlike the Gothic *a*- and *i*-stems, the *u*-stems are not syncopated, and consequently we get them in their primitive organic forms, the masculine and feminine taking the *s* in the nominative singular, *e.g.*: masc. *vulthus*, *sunus*, nom. plur. *sunyus*; fem. *handus*, nom. plur. *handyus*, *vrithus*, etc. The neuter exhibits no trace of a peculiar sign *t* or *m*, *e.g.*, *faihu*. The masculines and neuters preserve the *u* in the singular in the Old High German, but lose the nominative *s*, *e.g.*, *sunu*, *vihu*, etc. In the plural the *u*-stems pass into the *i*-stems; and in the Middle High German they altogether disappear, the masculines and feminines becoming confounded with the *i*-stems, and the neuters with the *a*-stems.

I have already mentioned that the primitive distinction between the *a*-, *i*-, and *u*-stems was very much obscured in the case of adjectives; and that, with the exception of traces, the *i*-stems had wholly died out. The *u*-forms of the adjective, which were not very numerous, took *s* in the nominative of both the masculines and feminines, but the neuters had no sign of gender, *e.g.*: nom. masc. and fem. *hardus*; neut. *hardu*. The *u*-forms died out in the Old High German, leaving for all adjectives only *a*-stems.

§ 6. Of Consonantal Stems.

PURE STEMS. S-STEMS.—GREEK AND LATIN.—ὁ μῦς, (*mus*.) gen. μῡός, which stands for μῡς-ος, = *muris* for *mus-is*. In the forms like οὔς, gen. ὠτ-ός—φώς, gen. φωτ-ός, etc., either the *τ* has become *ς*, or the nominative *s* has inorganically affixed itself, in which case the *t* dropped out. In either case these forms belong primitively to dental tenuis-stems, and not to the *s*-stems. *Mus*, *flos*, *mas*, without the nominative sign. Except in *vās*, *vāsis*, *s* becomes *r* in Latin in the oblique cases, as it stands between vowels. It sometimes appears duplicated, as in *os*, *ossis*, but here it stands for *st* (compare ὀστέον).

STEMS WITH SONANT AUSLAUTS. (SEMI-VOWELS, M, L, N, R, NG).

—GREEK AND LATIN: *semi-vowels*—*nix* for *nign-s*, *bos* for *bov-s*, etc.; *l-stems*—*ἄλ-ς*, *sal*; *n-stems*—*ρίς* for *ρίν-ς*, the liquid having dropped out; *φρήν*, without the nominative sign; *Par*, without the nominative suffix; *r-stems*—*χείρ*, *θήρ*, etc., *für*, without the nominative signs.

STEMS WITH MEDIAL AUSLAUTS.—GREEK AND LATIN: *b-stems*—*φλέψ* for *φλέβ-ς*, the *-ς* being the nominative suffix; *urb-s*, *scob-s*; *d-stems*—*πούς* for *πόδ-ς*; *pes* for *ped-s*; *vas* for *vad-s*, the dental having dropped out; *g-stems*—*φλόξ* for *φλόγ-ς*; *lex* for *leg-s*, *rex* for *reg-s*.

STEMS WITH TENUIS AUSLAUTS.—GREEK AND LATIN: *p-stems*—*γύψ* for *γύπ-ς*; *op-s*, etc.; *t-stems*—*φώς* for *φώτ-ς*; *dens* for *dent-s*, *pons* for *pont-s*, etc.; *k-stems*—*λύγξ* for *λύγκ-ς*, *σφήξ* for *σφήκ-ς*; *pax* for *pac-s*.

STEMS WITH ASPIRATED MUTE AUSLAUTS.—GREEK: *θρίξ* for *τρίχ-ς*, *βήξ* for *βήχ-ς*.

GOthic.—It has been shown in a previous section, that pure consonantal stems, properly so called, do not exist in the Gothic,¹² and that the forms which at first sight might come in here, belong rather to the vocalic middle forms, under which they have accordingly been treated. I shall merely give here a few examples of forms which might otherwise have come under the respective categories above given for the Greek and Latin: *saiv-s*, *fraiv*; *bagm-s*, *hilm*; *stol-s*, *mel*; *stiur*, *figgr-s*; *stab-s*, *lamb*; *sand-s*, *land*; *hug-s*, *gagg*; *hup-s*, *skip*; *skuft-s*, *beist*; *strik-s*, *leik*; *munths*, etc.

CONSONANTAL MIDDLE FORMS.—The nominative of some of the forms which come under this head exhibit the complete stem, which in the oblique case may be unrecognizable, owing to letter-changes or the dropping of letters. In most cases, however, the stem can be better determined from the oblique cases, in consequence of the nominative *s*, or the change of the vowel of the affixed syllable so altering the appearance of the stem in the nominative as to render it unrecognizable. The form of the stem to which the case-endings in the oblique cases are affixed is usually called the *Thema*, to distinguish it from the true stem-form, with which it sometimes coincides, but generally not. The neuter form of adjectives is best adapted for determining their stems.

S-STEMS.—In studying the stems of this class, we should be careful to distinguish the *s*-stems proper from words with the auslaut *s*, in some of which the *s* is secondary, being formed by

¹² Perhaps *baurgs* (f), a castle, town, gen. sing. nom. plur. *baurgs*; *Guth* (n. m.) gen. *Guths*, and some besides, are exceptions.

the softening of a *t*, etc., and in others it is the nominative *s*, before which the liquid *n* and the mutes *d* and *t* have dropped out.

GREEK.—Neuters of the third declension in *ος* (= Sanskrit *as*) which show the pure stem in the nominative; in the oblique cases the *ο* becomes *ε*, and the *ς* drops out, *e.g.*—*γέν-ος*, gen. *γέν-ε-ος* for *γέν-ε-σ-ος*, and contracted to *γέν-ους*. Adjectival substantives in *ης*, *εος* = *ους*, *e.g.*, *ἡ τριήρης*;—forms of this kind may be considered as true derivatives. Adjectives in *ης*, *ες*, *e.g.*: *σαφής*, *σαφές*, gen. *σαφ-έ-ος* for *σαφ-έ-σ-ος*, and contracted to *σαφούς*.

LATIN.—To this category belong certain isolated masculine and feminine substantives in *ος*, such as, *honor*, *arbor*, the *s* of which was afterwards softened to *r*. The adjective *vetus* comes under this head also. The substantives in *is* and *us*—*pulv-is*, *cin-is*, *Ven-ūs*, *tell-ūs*, are most probably *r*-stems, in which the *r* has dropped out before the nominative *s*. Neuters of the third declension in *us* (= Greek *ος*), the affixed syllable *us* being weakened before the oblique case-endings to *ūr* or *ēr*, *e.g.*: *corp-us*, gen. *corp-us-is*, weakened to *corp-ūr-is*, *genus*, gen. *gen-us-is*, weakened to *gen-ēr-is*.

STEMS WITH SONANT AUSLAUTS.—The stems which come under this category are: in the Greek those in *ν*, *ρ*; in the Latin and the Gothic *l*, *n*, *r*. *M* does not occur as the auslaut of a stem in either the Greek or the Latin. The pure stem is preserved in the nominative in the neuter,—the vowel being always short in the Greek. The other genders are distinguished in the Greek either by the nominative *s*, before which the liquid drops out, or especially in the feminines, by lengthening the vowel of the formational or affixed syllable. No such distinction of gender occurs in the Latin, the nominative *s* having given way to the liquid in almost every case, except in a very few instances, *e.g.*, *sanguis* for *sanguin-s*.

L-stems: stem-forming syllable *il*—masc. Latin *pugil*, *mugil*.

N-stems: stem-forming syllable *ān*—Greek neuter adjective *μέλαιν*; *ān*—masc. *παιάν*, gen. *παιᾶνος*; *ēn*—*λιμήν*, gen. *λιμέν-ος*, *ēn*—"Ελλην, gen. "Ελληνος; *in* softened to *en* in the nominative in *pecten*, and in the derivational suffix of verbal nouns, *-men*, gen. *-minis*, *e.g.*—*lumen*, *flumen*, etc.; *in*—*ἄκτιν* for *ἄκτιν-ς*; *ōn*—Greek adjective *πέπον*, masc. substantives *δαίμων*, gen. *δαίμονος*; *ōn*—*λειμών*, gen. *λειμώνος*. To the preceding may be added the nouns with vocalic auslaut, which are considered to have thrown off the *n*, and which I have already discussed, as, *homo*, *Macedo*, *carbo*, etc.

R-stems: stem-forming syllable *ār*—*νέκταρ*, Latin *Caesar*, Gothic *Kaisar*, *fadar*; *ār*—*calcār*, gen. *calcāris*; *ēr*—*ὁ ἄηρ* gen.

ἄερος, Latin *anser*; *ēr*—κρατήρ—in this and similar words the stem-forming syllable may be considered to be *τηρ*, and to be a derivational one for verbal nouns; *ōr*—ρήτωρ, gen. *ρήτορος*—here the stem-forming suffix is *τορ*, which may be compared with the Latin ones in *tor* and *sor*, e.g., *lector*, *cursor*;—*marmor* is produced, however, by duplication and not by suffix; *ūr*—masc. *augur*, gen. *auguris*, in which the *u* remains unchanged in the genitive case; *turtur* is a stem also formed by duplication; neuters which retain the *u* in the oblique cases—*sulfur* and the duplicated stem, *murmur*; neuters which soften the *ū* to *ō*—*femur*, gen. *femoris*, etc.

STEMS WITH MEDIAL AUSLAUTS.—Stem-forming syllables: *ib*—adjective *caelebs*, gen. *caelibis*; *ūb*—ὁ χάλυψ, for χάλυβς, gen. χάλυβος; *ād*—λαμπάς, gen. λαμπάδος, *lampas*, gen. *lampadis*; *ēd*—*mercēs*, gen. *mercedis*; *īd*—ἐλπίς, gen. ἐλπίδος, *cuspis*, gen. *cuspidis*, *praeses*, gen. *praesidis*; *īd*—κρηπίς, gen. κρηπίδος; *ōd*—*custos*, gen. *custodis*; *ūd*—*palus*, gen. *paludis*. *Ag* is not found either in the Greek or Latin; *ēg*—*lelex*, gen. *lelēgis*; *īg*—*remex*, gen. *remīgis*; *ūg*—πτέρουξ for πτέρουγς (in the Greek the nominative *s* fuses with the labial mute *b* and in the Greek and Latin with the palatals), gen. πτέρουγος.

STEMS WITH TENUIS AUSLAUTS.—Stem-forming syllables: *āp*—ἡ λαῖλαψ for λαῖλαπς, gen. λαῖλαπος; *īp*—*adeps*, gen. *adīpis*. *Princeps* and similar words do not come here, as they are true compound words in which one of the constituent stems is the pure stem *ceps*. *Op* and *ōp* occur only in stems forming constituents of compound words, e.g., κύκλωψ, gen. κύκλωπος, etc. *At*—a great number of the Greek forms in *āt* throw off the *t* in the nominative, and are, therefore, somewhat analogous to the Latin *n*-stems *homo*, *ordo*, etc., which throw off the *n*, e.g., σῶμα, στόμα, δρᾶμα, πρᾶγμα, etc., which form their genitive in *τος*. Sometimes *τ* is replaced in the nominative by *ρ* or *ς*, e.g., ἡπαρ, gen. ἡπατος; κρέας, gen. κρέατος. To the same category belong such forms in *īt*, as μέλι, gen. μελίτος. The Latin forms which may be referred to stems in *āt*, *āt*, *ēt*, and *ēt*, drop the *t* in the nominative, but retain the *s*, e.g., *anas*, *libertas*, *teges* (the *e* becomes long after a vowel, as in *abiēs*), *quies*. So likewise the Greek forms in *ēt* and *īt*, such as: ἐσθής, gen. ἐσθῆτος; χάρις, etc. The Latin forms in *īt* have the *ī* softened to *e*, e.g., *mīles*, gen. *mīlitis*. The following forms also occur: *īt*—*Samnis*, plur. *Samnītes*; *ōt*—ἔρως, gen. ἔρωτος; *nepōs*, gen. *nepōtis*; *ūt*—*salus*, gen. *salūtis*.

To this category belong also the Greek forms in *κ* and the Latin in *c*, of which it will only be necessary to mention a very few. Stem-forming syllables: *ak*, *ac*—πίναξ for πίνακς (we may

also add here the forms in -ακτ, as ἄναξ, gen. ἄνακτος; ἄκ, ἄε—θώραξ; *fornax*, and the adjectives having the derivational suffix *ac*, such as *audax*, *capax*, which inorganically retain the nominative *s* in the neuter; εκ, ἔε—ἁλώπηξ, gen., ἁλώπεκος, the neuter *halec*, or, fused with the nominative *s*, masc., *halex*; ικ, ἔε and ἔε—φοῖνιξ, *salix*, gen., *salicis*, *radix*, gen., *radicis*; ὄε—*Capadox*; ὄε, *ferox*; υκ, ἄε—κῆρῦξ, gen., κῆρῦκος, *Pollux*.

There are also in the Greek stems in ντ, νθ but not in νδ; in the Gothic there are also stems in *n*, (*t*), and *nd*, but as my object is rather to show what stems are, than to give a detailed account of all their forms, I will not dwell further upon this part of the subject.

§. 7. Of Derivation.

Having so often spoken of derivation as distinguished from middle forms, and *ya*-stems, I think it will not be out of place if I say a few additional words upon the subject here. Derivatives are words formed by the addition of affixes to verbal, nominal, and other stems. The affixes employed for this purpose are of two kinds: 1. Affixes consisting of single letters or syllables, which in their present state are not only not independent words, but cannot even be traced up with certainty to independent words, though having a definite symbolical signification which modifies the meaning of the stem. 2. Syllabic affixes which afford evidence of their having been once independent words, but which in process of time have been modified and have lost that character.

I have already remarked that Stem-formation cannot always be absolutely distinguished from Derivation; this is especially true in the case of the stems called middle forms, and derivatives formed by the derivational affixes of the first kind, which often consist of only a single letter. In discussing the different kinds of stems, I have pointed out some examples of this difficulty in the case of the Greek nouns in της, the verbal nouns in τορ, τηρ, *tor*, *sor*, and *men*, for which I proposed the term *Derivative Stems*, that is pseudo-stems formed upon already-existing stems, and not starting from roots, as all true stems do. The derivatives formed by the second kind of affixes are much less liable to be confounded with true stems; they often have, indeed, almost the character of compound words, that is, of words formed by the union of two or more stems. The proper distinction between Stem-formation and Derivation will, however, be best understood from a few examples of the different kinds of words which are formed by the latter process. From one kind of verbal form we may derive several others, thus, by the addition of the suffixes (Gr.)

σκ, (Lat.) *sc*, we get inchoative verbs, as, βόσχω from βόω, *cresco* from *creo*; by the suffixes (Lat.) *it*, etc. (N.H.G.) *er*, etc., we get frequentatives, as, *cogito* from *cogo*, *klappern* from *klappen*; by the suffixes (Lat.) *ill*, *ul*, etc. (N.H.G.) *el*, we obtain diminutives, as, *scribillo* from *scribo*, *ustulo* from *uro*, *ustum*, *säuseln* from *sausen*; by the (Lat.) suffix *ess* we get intensives, as, *capessere* from *capere*; by the (Lat.) suffix *uri*, we get desideratives, as, *esurio* from *edo*, *esum*. Or we may derive verbs from nouns by the addition of such suffixes as (Gr.) *a*, *εν*, *αιν*, etc. (Lat.) *are*, *ere*, *ire*, etc., *e. g.*, λιπάω from λίπας, κολακεύω from κόλαξ, λευκαίνω from λευκός, *nominare* from *nomen*, *lucere* from *lux*, *finire* from *finis*. We may in turn derive nouns from verbs, thus by the addition of the suffixes (Gr.) *ευς*, *της*, *τωρ*, *μος*, etc. (Lat.) *tor*, *tio* or *ti-on*, etc. (N.H.G.) *el*, *ung*, *ing*, *t*, *d*, etc., we get substantives such as γραφέυς from γράφω, ποιητής from ποιέω, ῥήτωρ from ῥέω, δυσμός from δύω; *victor* from *vinco*, *actio* from *ago*; *Hebel* from *heben*, *Reibung* from *reiben*, *Findling* from *finden*, *Macht* from *mögen*, *Jagd* from *jagen*; and by the addition of the suffixes (Lat.) *ac*, *ilis*, *ilis*, etc., we get adjectives, as *loquax* (for *loquac-s*) from *loquor*, *placabilis* from *placo*, *facilis* from *facio*. So in like manner we may get different kinds of substantives from one kind, such as diminutives, feminines, etc.; adjectives from substantives, and the converse; adverbs from adjectives, etc., of which, however, we need not give examples.

The greater number of the affixes mentioned in the preceding examples belong to the first kind. Those of the second class, being, on the other hand, of greater phonetic dimensions, have been less intimately fused with the stem, and consequently their historical development out of independent words can be more clearly traced. This kind of derivation was originally without doubt simple composition of the same kind as that by which compound words are still formed in living languages. It is the first stage of amalgamation from the mere agglutination which takes place in the formation of such words, as, *penknife*, *moonshine*, etc. Its transitional character is made still more evident by the circumstance that the affixes of this class are prefixes as well as suffixes, and that the former differs from particle composition in this only, that in the latter, two independent words still existing in the language, combine together, while in the former, an independent stem combines with a letter or stem not now independent.

In the Greek and Latin the derivatives of the second class are neither so well marked nor so numerous as in the Germanic languages. The suffixes *-ειδής*, *-φορος*, *-fex*, *-dicius*, etc., are really stems, and consequently we may consider words ending in them to be compound words, rather than derivatives, *e. g.*, *θεοειδής*,

καπηφόρος, *artifex*, *mendicus*, etc. In the English we have a number of well marked derivational suffixes of this class; e. g., -hood = N.H.G. -heit, Goth. *haidus*, way, condition, as for instance, *girlhood*; -ship = N.H.G. -schaft, O.H.G. *scaf*, shape, property, etc., as *partnership*; -dom = N.H.G. -thum, Goth. *dóm*, primitively, judgment, tribunal, dignity or condition of a person in general, as, for instance, *dukedom*; -some, a stem which signifies similarity, and, hence, Goth. *sama*, Eng. *same*, e. g., *handsome*; -ly = N.H.G. -lich, Goth. *leiks*, O.H.G. *lich*, Eng. *like*, similar, equal. Compare in the Romance languages the Italian suffix -mente, Fr. -ment (e. g., *sainement*, *purement*), from the Lat. *mens*.

§ 8. Of Composition.

Composition is the union of two or more stems, or even words with grammatical endings, so as to form one word, and may be looked upon as the highest stage of word-formation. Some languages possess the power of forming compound words with great facility, especially the Greek and Sanskrit. Among modern languages, German possesses it to some extent. Two kinds of Composition may be distinguished, the Synthetical and Parathetical. The first kind is where the first word loses its inflection, that is, occurs as a stem, and the last alone is inflected; the second kind consists of mere juxtaposition, each element of the compound retaining its inflexion. The parathetical may be considered to be the first stage of composition. Particle composition, such as that by which compound verbs are formed by prefixing prepositions, comes under the category of parathetical composition. In the older language-periods a copulative vowel was frequently introduced between the constituent words—a phenomenon which offers a remarkable analogy to the stem copulative vowel. In the Greek, this vowel was generally *o*, seldomer *ι*, or *ε*; in the Latin *i*, and exceptionally *o*, or *u*; in the Old High German it was generally *a*, afterwards *e*; and in the Modern German, as in the English, it has dropped out,¹³ or an *s*, and in the former language an *en*, which are flexional endings, have taken its place, e. g., ἡμερ(ο)δρόμος, *carn(i)fex*, *nacht(i)gall*, *Hül(f)sbuch*, *Tasch(en)buch*, *doom(s)day*. It is worthy of remark that the English word *night(in)gale* presents a kind of transition between the simple copulative *i* and the more usual Modern German *en*. The copulative vowel belonged, in the older languages, only to noun forms, and not to those obtained by the union of verbs and particles. Combination is sometimes accompanied by phonetic changes in one or both of the constituents; such, for example, as that which takes place in the stem-vowel in the Latin

¹³ It is, however, sometimes retained in N.H.G., as in *Tage-buch*.

verbs, *legere, colligere*, and which has been already noticed when discussing the subject of progressive assimilation, etc.

One of the constituents of a compound word represents the fundamental idea or basis of the conception; the other, the secondary idea by which the former is determined, modified, or limited. The former may be compared to the root of a word, and the latter to the grammatical affixes; with this difference, however, that the latter are chiefly suffixes, while in compound words the fundamental word is usually the last member; the qualifying word is consequently prefixed, *e.g., bride-groom, glass-window, and window-glass*. In some Greek verbal nouns the reverse position of the constituent members is apparent, *e.g., φιλόλογος*, etc. It was probably the oldest form of composition, but has almost wholly disappeared from written language, even from the Sanskrit. Curiously enough, it exists both in the spoken English, French, and German, *e.g., breakfast, tire-botte, taugenichts*. This circumstance is interesting as to the question of the origin of affixes.

CHAPTER II.

ON THE CASE-ENDINGS OF NOUNS IN THE CHIEF INDO-EUROPEAN LANGUAGES.

§. 1. *The Accusative Singular.*

As the classification of stems discussed in the foregoing chapter is based upon the manner in which they become nouns by affixing the nominative sign, I was obliged so far to anticipate the subject of flexional endings, as to describe in section 4 of the preceding chapter the character of the nominative ending. I need not, therefore, say anything further on that point here, and will accordingly pass on to the oblique cases, and first to the Accusative Singular.

The sign of the Accusative in Sanskrit, Zend, and Latin, is *m*; in Greek *ν*, Lithuanian and Old Prussian *n*. It is probable that in the primitive Indo-European language it was likewise *m*.

LATIN. The *m* was affixed: 1. directly to vocalic stems of the masculine and feminine forms of substantives and adjectives—*via-m, fide-m, cive-m, manu-m*; 2. with an intercalated copulative to all consonantal stems—*reg-e-m, arbor-e-m*.

The consonantal stems which have passed over into apparent vocalic stems, alluded to at p. 24, follow the rule of consonantal stems in the oblique cases, that is, require a copulative: *ration-e-m, carbon-e-m*. According to some philologists, the *i-* (*e-*) stems also take the copulative vowel like consonantal stems, the

declension vowel, or stem vowel, giving way before the flexional copulative. According to this view, *civem* would be *civ-e-m*, not *cive-m* with the *i* of the stem changed to *e* as was assumed above. The first view is the simpler and more rational.

The Sanskrit *m* is usually transformed by *anusvâra*¹⁴ into the nasal *n*. The Lithuanian *n* is also similarly weakened. In the Latin the *m* was generally disregarded in prosody, and suffered elision before vowel anlauts. It was dropped altogether in the most ancient Roman inscriptions, as, for example, in the epitaph of L. Cornelius Scipio, who was consul A.U.C. 494: *Hæc cepit Còrsicæ Aleriûque úrbe*¹⁵ for *Corsicam Aleriamque urbem*. It is curious that in the modern romance languages the nominative singular has been frequently formed from such mutilated accusative forms: Italian—*buono, imperatòre, leone*, = *bonum, imperatorem, leonem*. The Portuguese on the other hand retains in many instances the *m*—*homem, virgem, som*, = *hominem virginem, sonum*. The Italian forms its nominative plural from the corresponding Latin case—*pòrte, sérvì*, = *portæ, servi*; the Spanish, on the contrary, forms it from the accusative plural—*ricos hombres, los servos, los caballeros*. The Oscan has preserved the accusative *m* in all declensions.

GREEK. The Latin declensions are richer and more varied than those of the Greek. In the former there are five, which, however, may be reduced to three; the fourth may be included under the third, and the fifth under the first, by which we can assimilate them to the Greek.¹⁶ The fuller endings of the Latin, as, for example, the plural ones (*-rum, -bus*, etc.), may perhaps be attributed to the absence of the article, which gives such lucidity to the Greek declension, while it helps to weaken it, by rendering the endings less indispensable, and perhaps also to the frequent use of prepositions in the place of a greater number of cases. The *ν* may be found directly affixed to the vocalic stems as in the Latin: *γραῦν, πῆχυν*. The stems in *ω* and *ευ* are, however, an exception, as they do not form their accusative in *ν*: *ἡχώ, ἡχώ-α; βασιλεῦς, βασιλέ-α*. Attention has been already drawn to the anomalous character of the stems in *ω* (p. 24), which Curtius believed to be relics of *n*-stems. According to the hypothesis of Heyse regarding *civem*, mentioned above, these stems would be considered to take a copulative, before which the declension vowel *ω* gave way, and that afterwards the *ν* was

¹⁴ Anu-svâra, or "after sound", is the term used by Sanskrit grammarians for the marks . (*ṇ*) that is, a weakening of a nasal auslaut.

¹⁵ Bunsen—Beschreibung der Stadt Rom. III., 616, sqq.

¹⁶ A system which has been very successfully followed by Dr. Donaldson in his Latin Grammar.

dropped; so that the primitive form of ἡχό-*a* would have been ἡχό-*av*. Many other explanations may also be given: it does not, however, come within the objects of this introduction to discuss them.

GOTHIC. The accusative sign has been wholly lost in the Gothic, except in the masculines of the adjectives, so that the accusative form of substantives presents us with the naked stem. The *n* in the accusative forms belonging to the weak declension, such as *hanan*, *tuggôn*, etc., belongs to the stem, but was dropped in the nominative, by which a class of apparent vocalic stems was produced, to which allusion was made at p. 24. In the masculines of adjectives, we find the accusative sign preserved in the form *na*, the *a* being merely an inorganic addition, which was dropped in O. H. German, while the *n* has been preserved in N. H. German: Goth. *blinda-na*, N. H. G. *blinde-n*.

§. 2. The Genitive Singular.

SANSKRIT AND ZEND. The genitive singular endings in the Sanskrit are: masc. and neut., *syā*; masc. and fem. *s*; masc., fem., and neut., *as* and fem. *ās*. In masc. and fem. the endings *s* or *as* may be considered to be practically the same, the former being affixed to vocalic stems, and the latter to consonantal; especially as the stem vowels in the *i* and *u*-stems are always gunated in the genitive: e. g., *kavi-s*, *sānu-s*, gen. *kavé-s* = *kavai-s*, *sānô-s* = *sun-au-s*. With these endings the feminine ending *ās* of vocalic stems naturally connects itself, because if the stem vowel be short, the genitive may be formed by *s* alone with a gunation of the stem vowel, as well as with the ending *ās*: e. g., *prít-és* = *prít-ai-s*, or *prít-y-ās*. In the latter the stem vowel has been changed into *y*; when the stem vowel is long, the *i* *û* are invariably changed to *y*, *v*, and after *â*-stems a *y* is added, so that the endings are in reality *-yās*, *vās*. The genitive singular endings in Zend are: *hê* (also *hyâ*) = Skr. *syā*; *âo* = Skr. *ās*; *s* = Skr. *s*; and *ô* = Skr. *as*.

LATIN. The whole of the *a*-stems, that is those declined according to the first, second, and fifth declensions, no longer form their genitives singular in *s*. The word *paterfamilias* = *paterfamilia* has, however, preserved the true ancient form of the *a*-stems of the first declension, which corresponded with those of the same declension in the Greek. And, again, on old monuments we still find *suaes provinciae* = *sua provinciae*. The genitive ending of the first declension has thus become *æ* by the loss of the *s* after the diphthongation of the stem vowel. In the second and fifth declensions the genitive ending has been replaced by an affixed *i*, which had probably originally a locative signifi-

tion; in the second declension the flexional *i* absorbs the stem vowel—*scamn-i*; in the fifth declension the stem vowel is not absorbed, and except that after a consonant it is shortened, it is not further affected—*diē-i*, *fidē-i*.

Stems with consonantal auslaut and pure vocalic stems, that is, all nouns of the third declension, with the exception of the middle forms in *i* (*e*), affix *s* with a copulative *i*, corresponding to Skr. *ā*, Gr. *o* (*oς* = Lat. *is*): *gru-is*, *urb-is*. The observation made respecting the *i*-stems, when discussing the accusative ending, explains the reason why the *i*-stems are excepted; some philologists believing that they take a copulative in the genitive also. The *u*-stems of the fourth declension belong likewise to this category; we have the old forms *fructu-is*, *senatu-is*, afterwards the *s* dropped off and the *ui* contracted to *u* or *i*, as in the dative: *senatu*. According to the oldest inscriptions, as for example the *Senatus Consultum de Bacchanalibus*, it would appear that the copulative of the genitive was not *i*, but *o* or *u*, as in the words *nomin-us*, *senatu-os*, *domu-os*, and later *domu-us*.

Bopp traces the genitive ending *ius* of some pronouns and adjectives to the Sanskrit genitive ending *syā*. He supposes *jus* to be obtained by displacement from *syā* or *sja*: *hu-jus*, *cu-jus*, *illi-us* for *illi-jus*, etc. Donaldson, on the other hand, looks upon the Latin *jus* as a weakened form of the ending *yās*. May not this latter form represent in fact the first modification, which, according to Bopp's view, *syā* must have undergone? In connection with the latter view it may be mentioned that Steinthal has made the ingenious suggestion that the primitive genitive suffix was *syā*, which he considers to be made up of the nominative *s* and the relative pronoun stem *ya* (fem. *yā*), so that we might have two forms, a masc. *syā* and a fem. *syā*; the latter of which would give exactly the fem. suffix *yās*, while the Latin *jus* might have come from the masc. *syā*.

In the Oscan the genitive singular ending was *as*, for the first declension, and *eis* for the second and third: *Djūv-eis* = Lat. *Jov-is*. Here the Oscan forms are fuller and richer than those of the Latin, for besides preserving the *s* in all cases, we have traces both of the stem and the copulative vowels in the second and third declensions, while the former has been absorbed in the Latin second declension. In the Umbrian the genitive ended in *s*. or *r*.¹⁷

GREEK. The genitive singular is formed in the Greek by:

(a) Affixing *ς* to the feminines of the first declension in *α*, *η*, the inorganically shortened *α* of the nominative becoming *ᾱ* or *η*, corresponding to the Sanskrit feminine vocalic stems which

¹⁷ See the paradigms of the Umbrian declension quoted from Aufrecht u. Kirchoff's, *Sprachdenkmäler*, p. 115 sqq. in Donaldson's *Varronianus*.

take the ending *ās*—Μοῦσα, πείρα, gen. Μούση-ς, πειρά-ς. The Attic ending *ως* of the *i*-stems is considered by some as the complete representative of this Sanskrit *ās*, by which πόλεως = πόλγος is compared with the Skr. *prityās*. But, as Ebel points out (p. 83), the Homeric πόλγος leads rather to πόλεγος. The ending *ως* is not confined to the feminines, for we have the masculine βασιλέ-ως.

(b) By affixing *ς* with a copulative *ο* (Skr. *ā*) to stems with consonantal auslaut, pure vocalic stems and vocalic middle forms in *ι*, *υ*, *ω*, *ευ*: χειρ-ός, σῶμα-ος, κι-ός, ἀληθέ-ος, ἰχθύ-ος ἡχό-ος.

(c) Many nouns do not form their genitive in *ς*, as for example the *a*-stems of the first declension in *ης*, *ᾶς*, and those of the second declension in which the primitive *a* has passed into *ο*; in the Attic these nouns have *ου* in the genitive. The Attic *ου* of the first declension was obtained like the Ionic *εω* and the Doric *ᾱ*, from the Homeric *αο* (βορέαο, Αἰνείαο) which was obtained from *a-ιο*, and this from *a-σιο* = Skr. *śya*, by dropping *σ*. Bopp likewise explains the *ου* of the second declension from *śya*; in the stems in *ᾱ*, and in the pronouns of the third person, *ā-śya* becomes *ο-σιο*, the *σ* then dropped out by which the Epic *ο-ιο* was formed, and then *οο* contracted to *ου*; thus λόγιοι, λύκοι, and the Old Epic τῶιο must have been obtained from the older forms: λογό-σιο; λυκό-σιο = Skr. *vṛika-śya*; τῶ-σιο = Skr. *ta-śya*.

GOOTHIC. The Gothic *i*-stems which exist in the syncopated form in the nominative, affix the genitive *s* to the full form, the stem vowel *i* of the feminines being gunated: masc. nom. syncopated from *gast-s* (full organic form *gasti-s*), gen. *gasti-s*; fem. nom. syncopated form *ded-s* (for *dedi-s*), gen. *dedai-s*, nom. syncopated form *anst-s* (for *ansti-s*), gen. *anstai-s*. A similar gunation occurs in both masc. and fem. of *u*-stems, which likewise directly affix *s* to the gunated stem: mas. *sunu-s*, gen. *sunau-s*; fem. *handu-s*, gen. *handau-s*. The mas. and neut. of the *a*- and *ya*-stems affix the gen. *s* to the stem by a copulative, *i*, which replaces the declension vowel *a*, or, in other words, they have passed over to the *i*-declension: *fisk-s*, *dag-s*, *vaurd*, gen. *fiski-s*, *dagi-s*, *vaurdi-s*; nom. and gen. *haryis*, *hairdeis*. The masculines of *ya*-stems which decline according to the strong declension, are therefore the same in the genitive as in the nominative. The feminine *a*-stems, on the other hand, have preserved the declension *a* in the oblique cases—in the genitive as *ο*, but strengthened however before the genitive *s*: *giba*, *gibó-s*, a form which may be compared with the Skr. genitives in *ās*.

The masculine and neuter substantives and adjectives of the weak declension affix the genitive *s* directly to the *n*, which is the universal ending of the bases belonging to the weak declen-

sion: masc. *hana*, *hanin-s*; neut. *hairtô*, *hairtin-s*; fem. *tuggô*, *tuggôn-s*; fem. *managei*, *managein-s*.

In the Germanic languages the genitive *s* has been preserved in all the strong masc. and neut.; but the fem. already lost it in the O. H. G.; and in the N. H. G. they have lost all the flexional endings in the singular. The copulative vowel *i* of the maso. and neut. *a* and *i*-stems, becomes throughout *e* in the O. H. G.: Goth., masc. *fiskis*, O. H. G., *visces*; Goth., neut. *vaurdis*, O. H. G. *wortes*; Goth., masc. *gastis*, O. H. G. *gastes*. The fem. of the *a*-stems lose the *s* in the O. H. G., but retain the long vowel, which, however, becomes short in the M. H. G.: Goth., *giba*, *gibôs*; O. H. G., *kepa*, *kepâ* (ô); M. H. G., nom. and gen. *gebe*. The fem. of the *i*-stems likewise lose the *s* in the O. H. G.: *ansts*, *anstais*; O. H. G., *anst*, *ensti*. The declension vowel of the masc. *u*-stems likewise becomes *e*—Goth., *sunus*, *sunaus*; O. H. G., *sunu*, *sunes*; but the feminines appear to pass into the *i*-declension, with the loss of the genitive *s*—Goth., *handus*, *handaus*; O. H. G., *hant*, *henti*. In the weak declension, the genitive *s* is lost in the O. H. G.: Goth., masc. *hana*, *hanins*; O. H. G., *hano*, *hanin*; M. H. G., *hase*, *hasen*; neuter Goth., *hairtô*, *hairtins*; O. H. G., *herza*, *herzin*; M. H. G., *herze*, *herzen*.

LITHUANIAN AND SLAVONIAN. In Lithuanian the genitive singular ending is *s*. The masc. *a*-stems have lost the *s* and end in *ô*; according to Bopp this *ô* is merely the lengthened stem-vowel which replaces the suppressed case-ending. Schleicher on the other hand explains this *ô* as a contraction from *aya* which arose from *a-sya*. The Lettish has also lost the ending in the corresponding stems, while the Old Prussian has preserved it: Skr. *dêva-sya*=Lith. *dêwô*, Lett. *deewa*, O. Pr. *deiwa-s*. In *i*- and *u*-stems the stem vowel is gunated as in Gothic, and the Lithuanian has preserved the guna in the masc. as well as in the fem. *i*-stems; as in Sanskrit the *ai* is, however, contracted to *ê*: Lith. *avê-s*=Skr. *avê-s*. The genitive *s* has been lost in Old Slavonic; consonantal stems end in *e*, *o*-stems have the primitive *a* of the stem, *u*-stems *u*, and *i*-stems the naked *thema*. The Sanskrit ending *syā* is, however, represented by the pronominal ending *go*: Sl. *to-go*=Skr. *ta-sya*.

§ 3. The Dative, Locative, and Instrumental, Singular.

SANSKRIT AND ZEND. The singular dative endings in the Sanskrit are: mas., fem., and neut., *ê*; fem., *ai*; masc. and neut. *a*-stems, *âya*. In Zend the endings are also *ê*, and *ai*. In the Greek and the Latin it was perhaps *î* in all declensions. The dative ending in the Gothic was perhaps *a* (*ê*). The singular locative endings in the Sanskrit are: masc., fem., and neut., *i*;

fem. *ām*. The masc. *u*- and *i*-stems, and sometimes the fem. also, have a peculiar locative in *au*, before which the stem-vowel is dropped, or becomes *y*. Bopp supposes that it was obtained from *ās*, and that it is, therefore, a genitive form used in a locative sense. The singular instrumentāl endings in the Sanskrit are: masc., fem., and neut., *ā*, (*yā*); masc. and neut. *a*-stems, *a*, with an intercalated *n*: *e. g.*, *çivē-n-a*. The Sanskrit locative endings *i* and *ām* are represented in Zend by *-i*, and *-a?* and the instrumental by *a*.

LATIN.—In the *a*-stems of the first declension, the dative *i*, instead of producing *ai*, fuses with the stem vowel into *æ*. The *ō* of the second declension, like the corresponding Greek *ω*, has arisen from *oi*, as is proved by the old datives, *popoloi Romanoī*. It is worthy of remark, that while the locative *i* suppresses the thema vowel in the genitive, the latter, in most cases, absorbs the former in the dative. In the third, fourth, and fifth declensions, the *i* is affixed as an independent sound, and often even inorganically lengthened: *su-i*, *urb-i*, *fructu-i*. In some forms of the fourth and fifth declension, the *i* is suppressed by the thema vowel, *u*, *e*: *tactu* (Plautus), *usu* (Lucretius), *faciē* (Lucilius). The genitive ending having been replaced by a locative *i* in the fifth declension, the genitive and dative coincide in that declension.

In the Oscan, the dative of the first declension was formed in *ai*, like the locative, which had also *æ*; in the second declension the dative ending was *úi*, the locative being in *ei*, and in the third declension the dative ending was *ei*, corresponding to the Umbrian in *e* for all declensions, which, unlike the ablative, was probably (at least originally), long, although the *morte* in the epitaph of Plautus—*Postquam morte datu' st Plautus Comēdia luget*, if it be an Umbrian dative = *morti*, is short. The Oscan and Umbrian dative endings *ai*, *ei*, and *e*, obviously lead to the characteristic dative endings *āi*, *ē*, in the Sanskrit. This would seem to show that the Latin dative *i* may not have had originally a locative signification, but is a true descendant of a primitive dative.

GREEK.—The Greek dative *ι* fuses with the thema vowels, *a*, *ē*, *o*, into a false diphthong in the *a*-stems, that is in the first and second declensions: *ἡμέρα*, *νίκη*, *οἶκω*, for which we have also the form *οἶκοι*. With the vowels *ε*, *ο*, a true diphthong is produced: *πόλει*, *ἡχοῖ*. The stems declining according to the third declension affix the dative *i* directly to the stem, without modification. The Epic form, *φι*, of the dative ending, will be noticed in the section on the dative plural. The dative suffix in the Greek, and perhaps also in the Latin, appears to have had originally a locative signification, and which several words still show: *e. g.*, *Σαλαμῖνι*, *Μαραθῶνι*.

GOthic. The mas. and neut. substantives of the *a*-, *ya*-, and *i*-stems belonging to the strong declension, form their datives in *a*; in the *a*- and *ya*-stems the ending coincides with the stem vowel, and in the *i*-stems replaces it: *fiska*, *harya*, *hairdya*, *gasta*. In the O.H.G. the dative of these forms is also *a*, which in M. and N.H.G. becomes *e*. The feminine *a*- and *i*-stems form their dative in *i*, which is however gunated as in the genitive: *giba*, *gibai*; *deds*, *dedai*. We might explain *gibai* with Bopp to be for *gibai-a*, with diphthongation of the stem vowel, the dative sign having fallen off. In the same way the O.H.G. dative of *geba*, *gebô* (*û*) would likewise be an extension of the stem vowel without a dative sign. In the case of the fem. *i*-stems, we must suppose upon Bopp's view that the stem vowel was gunated: *dedai* for *dedai-a*. The dative of the *u*-stems may be explained in the same way; there is no proper dative ending, but instead of it *au*, produced by a gunation of the stem-*u*, as in the genitive: *sun-au*, *hand-au*, for *sun-ar-a*, *hand-ar-a*. In the O.H.G. the gunating *a* is replaced by an *i*. The consonantal middle forms have lost their dative sign: *fiyand* for *fiyanda*; *brothr* for *brothra*. The nouns of the weak declension have no dative suffix; in the masc. and neut. they all end in *in*; and in the fem. in *ôn* and *ein*; these endings become masc. *in*, fem. *ûn* and *în* in the O.H.G., and *en* in all genders in the N.H.G.

According to Bopp the dative sign *a* was originally the suffix of the instrumental = Skr. *a*. The masc. and neut. *a*- and *i*-stems of the O.H.G. substantives, and adjectives, belonging to the strong declension show an instrumental in *u*: *tagu*, *gastu*, *wortu*, which Bopp believes to have arisen from *a*. The original instrumental has thus assumed a dative meaning, while a phonetically different form has been developed out of it to express the instrumental. In the Gothic the adjectives have in their strong declension a special dative ending for the masc. and neut.; the feminines on the other hand correspond with substantives; in the O. and M.H.G., however, the feminines have likewise a peculiar ending. These endings are pronoun endings which have passed over to the adjectives. The following paradigm will render this passage obvious:

	Masc. and Neut.		Fem.	
	Adject.	Pron.	Adject.	Pron.
Goth. . . .	blind-amma	th-amma	blind-ai	this-ai
O.H.G. . . .	plint-emu (emo)	d-emu	plint-êru	d-eru
M.H.G. . . .	blind-em	d-em	blind-er	d-er

LITHUANIAN AND SLAVONIAN. The dative ending in Lithuanian is *i* (in fem. *i*-stems *ei*). In Old Slavonian consonantal and *u*-stems end in *i*. This *i*, according to Bopp, corresponds to the

Sanskrit dative ending $\acute{e}=ai$. masc. and neut. *o*-stems end in *u*; fem. *a*-stems in $\acute{e}$; and Masc. and fem. *i*-stems in *i*. In Lithuanian the locative ends in *e* and *je*. Although this *e* is short, Bopp thinks it has arisen from *ai* produced by the stem-vowel and the locative *i*. In O. Slavonian the locative ending is *i* in consonantal and *u*-stems, and is therefore apparently identical with the dative; in masc. and neut. *o*-stems, and fem. *a*-stems it is $\acute{e}$. The locative *i* has been lost in Lettish, the stem-vowel is however lengthened in *a*-stems. The instrumental ending in Lithuanian is *mi*, which is evidently connected with the plural instrumental ending *mis*=Skr. *bhis*, Zd. *bis*. Masc. and fem. *a*-stems do not, however, take the ending, the former end in *u*, and the latter coincide with the nominative.

§. 4. *The Ablative Singular.*

The Sanskrit, Zend, and Latin, have an ablative singular, but in the dual and plural they express the ablative signification by the dative, as other languages do by the genitive. In the Sanskrit the ablative endings are: masc. and neut. *a*-stems *t*; masc., fem., and neut. of the other declensions *as*, which resembles the genitive. But, as Bopp has concluded from the analogy of the first and second personal pronouns, *mat*, *vat*, and from the Zend ablatives, the primitive ablative form was *t*. This is further confirmed by the ablative suffix in the oldest Latin, and in the Oscan, being *d*, and therefore quite distinct from the dative. Thus we have on the Columna Rostrata: *praesented sumod Dictatored olorom in altod marid puegnad vicet*.¹⁸ The *d* was however frequently apokoped: *e. g.* *mari* for *marid*, *senatu* for *senatud*, etc. In the Umbrian the ablative ends in a vowel which is sometimes *a*, *i*, and *u*, as well as *e*, and therefore does not always correspond to the dative. In the Sanskrit the ablative has the signification of *whence* in the sense of space; in the Latin it has, however, a wider application, because, in addition to the proper ablative meaning, it often combines in its application a locative and instrumental signification.

The ablative sign may also be recognized in adverbs, as in *bened*, *facillumed*, which are evidently the old ablatives, *bonod*, or *bonud*, *facillumod* or *facillumud*; and in prepositions *suprād*, *entrād*. According to Bopp, the ablative sign is also found in the enclitic pronoun *met* (=Skr. *mat* from *me*), which occurs in the compounds *egomet*, *memet*, and in the conjunction *sed*, anciently written *set*. The suffix *tus* (=Skr. *tas*) in *cælitus*, and the *de* in *inde*, *unde*, are perhaps likewise related to it.

¹⁸ Donaldson's Varronianus, 2nd Ed., p. 229. The Oscan form *praesentid* occurs on the Bantine Table, l. 21.

§. 5. *The Dual.*

Peculiar dual forms of substantives are only to be found in the Sanskrit, Zend, Greek, Slavonian, and Lithuanian.¹⁹ In the Sanskrit the dual endings are: nom., acc., and voc. masc. and fem. *au* (in the Veda dialect *á*, and in the Zend *ā*); neut. *ī* (which fuses to *ē* with the stem *a*); dative, instrumental, and ablative *bhyām* in all genders; genitive *ós*, *yós* in all genders; and locative *ós*, which coincides, therefore, with the genitive. The Greek has only two dual forms: 1. that of the nominative, accusative, and vocative; and, 2. that of the genitive and dative. The nom. acc. and voc. dual sign, in all three genders of the third declension in the Greek, is *ε*; in the first and second declensions the ending is suppressed and the stem vowels *a*, *o*, lengthened to *ā*, *ω*; the same thing takes place in the masc. and feminine of the *i*- and *u*-stems in the Sanskrit. The dative (also genitive) dual suffix in the Greek is *ιν*, which in the first and second declension is affixed after the stem vowel, which fuses with the *ι* into a diphthong; in the third declension the affix is *οιν* instead of *ιν*.

The Old Slavonian has preserved the dual ending more completely than the Lithuanian. Masc. *ā*-stems end in the nom. acc. and voc. in *a*; fem. and neut. *a*-stems in *ē* (*ye*); masc. and fem. *i*-stems in *-i*; and *u*-stems in *ū* (generally = Skr. *ū*), or they pass into the *a* declension; consonantal stems in *i* (sometimes in *ē*). The genitive and locative end in Old Slavonian in all genders in *u*, and the dative and instrumental in *ma*. In Lithuanian masc. *a*-stems end in the nom. acc. and voc. in *u*, which Bopp explains to have arisen from the Veda ending *á*. In the *i*- and *u*-stems the ending is suppressed, as in the Sanskrit, but the stem vowel is not, however, lengthened, as in that language. The Lithuanian genitive dual ending *ū*, is borrowed from the plural; Bopp now however thinks that this *ū* is a true dual ending, and, like the corresponding O. Slavonian *u*, connected with the Sanskrit genitive dual ending *ós*: Lith. *dvėj-ū* = Skr. *dvay-ós* duorum, duarum (see Dr. Ebel's opposite opinion, p. 84). The locative is lost in Lithuanian. The dative and instrumental dual in Lithuanian is *m*.

If we compare the dative dual suffix in the Sanskrit *bhyām*, which is also that of the instrumental and ablative, with the plural suffix for the dative and ablative *bhyas* = Lat. *bus*, the *y* being ejected, we see that *bhya* is common to both, and may therefore be considered as the proper dative suffix, while the proper dual sign may be assumed to be *m*, and that of the

¹⁹ See "On the Celtic Dual", §. 10. p. 85, for Ebel's observations on the relics of dual forms in Irish.

plural *s*. The dual sign *m* has been lost in the Zend, and the dative accordingly ends in *bya*. Respecting the Greek dative dual suffix there are two hypotheses. Bopp believes *iv* to be nothing more than a crippled form of *bhyām*. Düntzer, on the other hand, believes that the dual sign $\nu = \mu$ is simply affixed to the singular dative form in *i*.

The only traces of special dual forms in the Latin are *duo* and *ambo*; and in the Gothic and Old High German they are only to be met with in the personal pronouns.

§. 6. *The Nominative and Vocative Plural.*

The nominative and vocative are alike in all Indo-European languages. In the Sanskrit the masc. and fem. ended in *ās*; the neuters ended in *i*, which was affixed to the stem with an euphonical *n* between the stem vowel, which was lengthened, and the *i*. In the Zend the masc. and fem. ended in *ô*, which represents the Sanskrit *as*, and the nom. and acc. plur. of neuter nouns in *a*, which was also the ending in the majority of the old languages of the family. Bopp considers the Sanskrit *i* as merely a weakened form of such an *a*. In the Oscan the first declension ended in *as*, and the second in *ūs*; and in the Umbrian, besides *as* and *us*, the endings *ar*, *or*, also occur, the *r* being obviously formed from *s*. In a fragment of Pomponius, which is found in Nonius Marcellus, we meet with the nom. plur. *laetitias insperatas*. These forms perfectly represent the Sanskrit *as*. The Greek $\epsilon\varsigma$ and the Latin *ēs* of the third declension likewise represent the Sanskrit ending. In the fourth declension in the Latin the ending is *ūs*, the *ū* being formed by the fusion and contraction of the stem vowel with the *e* (*a*) of the ending. In the fifth Latin declension the ending *ēs* results from a similar contraction of *e-es* into *ēs*. We may explain, in the same manner, the long *ē* of the ending of the *i*-stems of the third declension, in which it is organic, as a contraction of *i-es*. In the other forms of the third declension the *ē* is inorganically long. The duplicated form *ūs-as*, which occurs in the Vedas, and which appears to have been intended to mark in a very material manner the plural number, has been suggested as an explanation of this inorganic long *ē* in the Latin; but the simplest explanation is to suppose an invasion of the form of the *i*-stems. This tendency in the Latin to give *i*-forms to nouns of the third declension, which had not them originally, is illustrated by such words as *navis* from *vaũc*, *civis* from the Oscan *cevs*, etc.

All the masc. and fem. *a*-stems of the first and second declensions in the Greek and Latin end in *i*. In the Greek the *i* combines with the stem vowels *a*, *o* into *ai*, *oi*; in the Latin *a*-forms

of the first declension, the stem vowel and ending combine to *ai*, which, as in the genitive, passes into *æ*. We have evidence of this passage in the *Senatus Consultum de Bacchanalibus*, where we find *tabelai datai* for *tabellæ datæ*. The *i* of the case-ending has absorbed the *u* of the *a*-stems of the second Latin declension in *us*—*populi, domini*; but in Old Latin it was *poplæ*, from *poplo-i*, etc. On old inscriptions we find, instead of *i*, the anomalous nom. plur. ending *eis*=*īs*: *hisee magistreis*.

Neuter nouns form their nom. and acc. plural in *a*, which in the *a*-stems of the second declension in the Greek and Latin is affixed in place of the stem vowel *o*, *u*, which is dropped—*δῶρ-α, dona*; in the third declension the *a* is affixed without dropping the declension vowel—*ἰδοτ-α, mari-a*; this is also the case in the fourth Latin declension—*cornu-a*.

According to Bopp the plural ending *as* is merely “an extension of the singular nominative sign *s*, so that there lies in the extension of the case suffix a symbolical indication of plurality”. This seems to imply that the *a* of the ending is in reality the plural sign. This affords a simple explanation of the circumstance that, the nom. acc. and voc. plur. of neuter nouns are formed by dropping the nominative *s*, which has a certain positive gender character. Grimm and other philologists believe the true sign of the plural to be *s*. Many forcible reasons may be given in support of this view, which, however, cannot find a place here. The plural ending *i* may be looked upon as the pronominal ending, Skr. *é*=a primitive *ai*, Lith. and Goth. *ai*, Gr. *oi*, Slav. *i*, which invaded the substantives.

GOTHIC. All masculines and feminines both of the weak and strong declensions end in *s* in the Gothic. The masc. and fem. *a*-stems of the strong declension end in *ós*, which represents the Sanskrit *ās*, the long vowel of the Gothic being the result of a contraction of the stem and case-ending vowels. The *i*-stems end in *eis*; the *u*-stems in *yus* (for *ius*). The ending of the masc. and fem. of the weak declension is *ns*, which is directly affixed to the stem; the *n* is the characteristic sign of the weak declension, and, as has been pointed out at p. 25, is added to all the cases except the nom. sing. and dat. plur. All the neuters end in *a*; those of the weak declension having the characteristic *n* before the *a*. The following paradigm will illustrate these rules:—

Strong declension.

A-STEMS.		I-STEMS.		U-STEMS.	
<i>Sing.</i>	<i>Plur.</i>	<i>Sing.</i>	<i>Plur.</i>	<i>Sing.</i>	<i>Plur.</i>
<i>Masc.</i> fiskš . . .	fiskôš	balgs . . .	balgeis	sunus . . .	sunyus
<i>Fem.</i> giba . . .	gibôš	ansts . . .	ansteis	handus . .	handyus
<i>Neut.</i> vaurd . . .	vaurda	—	—	faihu . . .	—

Weak declension.

Masc. hana . . hanans

Fem. tuggô . . tuggôns managei . manageins

Neut. hairtô . . hairtôna

In the O.H.G. the *s* dropped off in every case; in the strong declension the long vowel remains: *visc*, *viscâ*; *pelk*, *pelkî*; *sunu*, *sunî*. In the weak declension the stem-forming *a*, *ô* of the Gothic has been obscured to *u*, and the ending is accordingly *ûn*: *zunga*, *zungûn*. All the neuters drop the *a*, so that those belonging to the strong declension have no ending, while those belonging to the weak end, like the masc. and fem., in *un*: *daz wort*, *diu wort*; *herza*, *herzun*.

In the M. and N.H.G. all the different vowels of the ending become *e* in the masculines and feminines, so that the strong nominative plurals all end in *e*, and the weak in *en*. This *e* has likewise invaded the neuters in the N.H.G., which as a rule take *e*: *Worte*. Sometimes instead of *e*, they take up *er*. This suffix is not a flexional ending, and does not exist in the Gothic; it first made its appearance, according to J. Grimm, in the O.H.G. as *ir* attached to neuters. In the N.H.G. it has however invaded the masculines also, in which, as well as in the neuters, the root vowel is frequently diphthongated: neut. *wörter*; masc. *männer*, *geister*. The neuters of the weak declension end in M.H.G. like the weak masculines in *en*: *herze*, *herzen*.

The plural forms of adjectives declining according to the weak declension in the Gothic, Old and Middle High German, are like those of the substantives. In the strong declension, on the other hand, they have, with the exception of the Gothic neuters, forms, which like those of the dative singular, appear to have passed over from the pronouns. The following paradigm will illustrate this invasion of the pronominal endings:

	Masculine.		Feminine.		Neuter.	
	Adject.	Pron.	Adject.	Pron.	Adject.	Pron.
Goth. . . .	blind-ai	th-ai	blind-ôs	th-ôs	blind-a	th-ô
O.H.G. . . .	plint-ê	di-ê	plint ô	di-ô	plint-u	di-u
M.H.G. . . .	blind-e	di-e	blind-e	di-e	blind-iu	d-iu

It is worthy of remark that the modern languages,—Spanish, Portuguese, French, and, with few exceptions, English,—form the plural of all nouns in *s*.

LITHUANIAN AND SLAVONIAN. The *s* of the Sanskrit ending *as* has been preserved in the Lithuanian; the masc. *a*-stems have, however, taken the pronominal ending, which in substantives is the diphthong *ai*, and in adjectives *i*. The *s* of the ending *as* has been lost in O. Slavonian, but the vowel has been preserved as *e*. The crippling of the diphthong *ai* to *i*, which

occurs in Lithuanian adjectives, extends to substantives and pronouns in O. Slavonian: *vlūki* lupi, for *vlūkoī*, *tī*=hi, *oni*=illi. The Lithuanian, on the other hand, contracts *ai* to *ē* in the pronominal declension: Lith. *tē*=Lat. *hi*, Skr. *tē*, Goth. *thai*, Gr. *τοί*. In Old Prussian, substantives, pronouns, and even adjectives of masc. *a*-stems have *ai*, or occasionally for it *ei* and *oi*. In Lithuanian the stem-vowel is lengthened in *i*- and *u*-stems; in Sanskrit the stem-vowel is gunated in the corresponding stems: Lith. *āvys*=Skr. *aray-as*; Lith. *sūnū-s*=Skr. *sūnav-as*. In Gothic evidence of a similar gunation is found in the endings of the *i*- and *u*-stems (p. 45); the gunating vowel has been preserved as *i*, which in *i*-stems fuses with the stem-vowel to *ī* (*ei*), and in *u*-stems becomes *y* before *u*: *gastei-s*, *sunyu-s* for *suniu-s*.

§. 7. The Accusative Plural.

The accusative plural endings in the Sanskrit are—masc. and fem. *s*, *as*; masc. *n*; neut. *i*. In the Zend these endings are: *ō* (=Skr. *as*) for masc. and fem. consonantal, *i*-, and *u*-stems which is affixed with or without guna; *o* (Skr. *s*) fem. *a*-stems; *s* (=Skr. *s*) fem. *i*-, and *u*-stems; and the peculiar ending *eus* of masc. and fem. nouns in *r*, which Bopp explains from *ans*, the *n* becoming vocalized, and the *a* changed to *e*. In the Oscan, the first declension had *ass*, and the second *úss*. The masc. and fem. *a*-stems of the first declension in the Greek and Latin ended in *ās*—Μοῦσα_ς, *mensās*; those of the second declension in *ovς* in the Greek, and *ōs* in the Latin. The *i*-stems, and the stems with consonantal auslaut of the third declension in the Greek, have the ending *ᾱς*, which, in the case of the latter, is affixed to the pure stem or thema: πῶδα, πῶδα_ς. The *u*-stems, which retain the *u* in their thema, end in Greek in *ῦς*: nom. plur. ἰχθῦ_ς, acc. ἰχθῦ_ς. The *a*-stems of the fifth declension, the *i*-stems, and those with consonantal auslaut of the third, and the *u*-stems of the fourth declension in the Latin, coincide with the nominative plural, as do the accusative plural of all neuter nouns in the Greek, Latin, etc. In the older Latin, however, the accusative plural of *i*-stems and also of consonantal stems, ended in *eis* or *īs*. In the Umbrian the accusative plural ended in *f* in all declensions.

The accusative plural ending of all masculine nouns, and of the feminine forms of the *u*- and *i*-stems in the Gothic, is *ns*, which is directly affixed to the full stem form: *jiska-ns*, *balgi-ns*, *sunu-ns*. The accusative plural of the feminine *a*-stems has not *n*, and therefore coincides with the nom. plur.: *gibōs*, *bidōs*, etc.

In the Old High German, the accusative plural coincides throughout with the nominative.

The universality of the *ns* in the Gothic accusative plural, and the circumstance that *n* (*n*) is the sign of the accusative, suggests a very simple explanation of the plural suffix. Grimm, in fact, regards it as the accusative singular + the plural *s*: the primitive form would accordingly be *-ms* (*-ns*). The sign of the accusative has therefore been wholly lost in the plural in the Greek and Latin, and, except in the masc. *a*-stems, in the Sanskrit also; the Greek and Latin have preserved the plural *s*, while the Sanskrit forms which have preserved the *n* have lost the plural *s*. The Greek and Latin accusative plural endings must, therefore, have dropped an *n*, so that *āc* and *ās* stand for *avc* and *ams*; *ovc* for *ovc*, and *ōs* for *ums*, *oms*.

Some examples of this complete accusative ending have been preserved in the Greek dialects, e.g. *τόν-ς* = *τούς*. It has likewise been preserved in Old Prussian in the same form as in the Gothic, both the masc. and fem. having the masc. ending *ns*; the Lithuanian, on the other hand, has only preserved the *s*: Skr. *dēvā-n*, O.Pr. *deiwa-ns* deos, Lith. *dėwu-s*. In Lithuanian the stem-vowel of fem. *a*-stems, masc. and fem. *i*-stems, and masc. *u*-stems is short, while in the nom. it is long. The *a* of masc. *a*-stems has been weakened to *u*. In Old Slavonian the accusative ending has been lost in all masc. and fem. stems; stems in *n* or *r*, however, add an *i*, which must probably be explained by a transition into *i*-stems.

§. 8. *The Genitive Plural.*

SANSKRIT AND ZEND. The usual ending of the genitive plural of substantives and adjectives in the Sanskrit is *ām*, which is affixed directly to consonantal stems, and to vocalic stems by means of an euphonic *n* between the stem vowel and that of the ending: *pad-ām*; *çivā-n-ām*, *prīti-n-ām*. This *ām* was probably primitive *sām*, a form which in fact we find in the pronouns which preserve the primitive forms longer and completer than the nouns, e.g. in the demonstrative *tē-shām*, (*horum*), *tāsām*, (*harum*). The *s* is the sign of the genitive singular, so that *am* is, properly speaking, the genitive plural sign. The genitive plural in Zend is *aīm*; in the *a*- and *ā*-stems this ending takes a euphonic *n*, as in the Sanskrit.

LATIN. The *a*-stems of the first, second, and fifth declensions, form their genitive plural in *rum*. This *rum* represents the Sanskrit *sām*, and must have been anciently *sum*, which in turn leads to an earlier *sóm* = Skr. *sām*. The Oscan genitive plural suffix *zum* appears to confirm this view. The *i*-stems, and the consonantal stems of the third declension, and the *u*-stems, form their genitive plural usually in *um* = Skr. *ām*: *marī-um*,

lapid-um, fructu-um. The *i-um* of the *i-stems* has penetrated into many forms among consonantal stems, such as *urbium, serpentium*, etc. On the other hand, many *i-stems* drop the stem-forming *-i* in the genitive plural: *can-um, vat-um*. In some antique forms belonging to consonantal stems of the third declension preserved in Varro and Charisius, the full form *rum* is affixed to the stem by means of a copulative *ē*: *lapid-ē-rum* instead of *lapid-um, bov-ē-rum* instead of *bo-um*. We may also, however, consider them as formed from the genitive singular by the addition of *um*: *bover-um*=*bovis-um*; *lapidēr-um*=*lapidis-um*. While, on the one hand, the full form *rum*=*sām* was sometimes found in nouns of the third declension, many *a-stems* of the first and second formed their genitive plural in *um*: *agricol-um, vir-um*.

GREEK. The genitive plural ends in the Greek in *ων*=Skr. *am*. The ending of the first declension has a circumflex, which points to an original form *ά-ων*: *Μουσών*, old form *Μουσάων*. This *ά-ων* probably represents a fuller form *σων*=Skr. *sām*=Oscan *zum*=Lat. *rum*, so that *Μουσάων* would represent a still more complete form *Μουσά-σων*=Lat. *Musarum*. In the second declension the copulative *ο* dropped out before the ending: *λόγ-ων*. In the third declension the suffix attaches itself directly to the thema in consonantal and vocalic stems: *ποδ-ών, ιχθύ-ων, πήχε-ων, βασιλέ-ων*. In the stems formed by the stem-forming suffixes *ος* and *ες*, in which the *σ* drops out, and the thema vowel is *ε*, the latter is however contracted with the ending: *τριηρών* for *τριηρέ-ων*; *σαφών* for *σαφέ-ων*.

GOthic. In the masc. and neut. forms belonging both to the strong and weak declension of the *a-stems*, the genitive plural ends in *é*; that of the feminine *a-stems* ends in *ó*; and of the masculine and feminine *i* and *u-stems* likewise in *é*. In the O.H.G. all the *a-stems* form their genitive plural in *ó*, and the *i* and *u-stems* in *i, o*, the usual *n* being intercalated in the weak declension before the ending. The strong feminine *a-stems* likewise introduce an euphonic *n* between the stem and the ending, as in the Sanskrit: Goth. fem. *gib-ó*, O.H.G. *kepó-n-ó* (cf. Skr. *girá-u-ám*).

In the Middle and New High German, all the strong forms end in *e*, and the weak forms lose the vowel-ending, so that the genitive is always the same as the nominative.

The *é, ó* of the Gothic is derived from *á*, so that the *s* and *m* of the primitive ending have been wholly lost, and the vowel only preserved. The *s* has however been preserved as *z* in the Gothic in the adjectives and pronouns declined strongly; in the adjectives the stem vowel is diphthongated. The Gothic *z* becomes *r* in the M. and N.H.G.

LITHUANIAN AND SLAVONIAN. The Lithuanian genitive plural ends in *ū*. The Old Prussian has lost the vowel, and preserved the consonant of the ending *am* as *n*. It has also preserved the full form = Skr. *sām*, in its pronominal genitive plural ending *son*. The Old Slavonian has *ū*; in the pronominal declension it has, however, the ending *chŭ*, which Bopp explains as = Skr. *sām*, O. Pr. *son*.

§. 9. *The Dative, Locative, Instrumental, and Ablative Plural.*

The dative and ablative endings in the Sanskrit for all genders is *bhyas*; for the instrumental the ending for all genders is *bhis*, but the masculine *a*-stems form an instrumental in *is*. The locative plural for all genders is *su* (*shu*). In the Zend the dative and ablative end in *byô*, which fully represents the Sanskrit *bhyas*; the instrumental ending is *bis*; and the locative *hva* (=Skr. *su*), *sva* (=Skr. *shu*).

There are two forms of the dative plural ending in the Greek and Latin, one of which is considered to be more ancient than the other. The older form in the Greek is *σι, σιν*, and in the Latin *bus*; the newer form, which is alike in both, is *is*. The latter occurs in the first and second declension in the Greek and Latin; in the former language the stem vowel combines to a diphthong with that of the ending; in the latter the stem vowel fuses and contracts to *īs*—*mensīs* for *mensa-is*. The Oscan dative and ablative plural endings *a-is* (first declension), *ū-is*, *o-is* (second decl.), present us with similar uncontracted forms. The suffix *is* may be looked upon with considerable probability as the locative singular joined with the plural sign *s*.

The old Greek form *σι, σιν*, which is found in the third declension, originally occurred likewise in the first and second declensions, as is proved by the old datives *μούσαισι, λόγοισι*, a circumstance which shows that the ending *is* is of later origin. In the Old Greek we find the fuller form *σσι—πάντ-ε-σσι, κύν-ε-σσι*; this form occurs not only in Homer, but also in the Eolic, and to some extent in the Doric dialects. Aufrecht, Benfey, and others consider this suffix *σσι* to have arisen from *σφι* = Zd. *sva*. The *a* and *o* of the stems in the first and second declension must have changed into *ai* and *oi* under the influence of the final *i*; this lengthening of the vowel in its turn reacted upon the ending, and one *σ* dropped out.

The Latin dative and ablative plural ending *bus*, which corresponds to the Sanskrit *bhyas*, may be explained from the dative ending *bi* in *tibi* (= *tu-bi*) *sibi*, and *mihī*, the *b* being softened to *h* in the latter. This *bi* or *bhi* corresponds to the Sanskrit *bhyam*, *hyam*: *tu-bhyam* = *tibi*; *mahyam* mutilated from *mabhyam* =

mihi. It had evidently a primitive locative signification. Bopp compares it with the Sanskrit preposition *abhi*, with which the German *bei* (English *by* in the locative sense) is to be connected. We may also connect *ibi*, which is the locative of the pronominal stem *i-s*, and the analogous form *ubi*. Aufrecht has shown that the basis of the endings *bi* in *ibi* and *ubi*, and *im* in *illim*, *istim* is a *jim*, which may be recognized in the Umbrian locative plural suffix *fem*, which drops the *m*, and sometimes is weakened to *f*.²⁰ And further that the Old Epic $\phi\iota$, $\phi\iota\nu$ is the same case suffix. From all this it is evident that *bhyas*=*bus* is simply a singular locative dative *bhi*, combined with the plural suffix *as*. Again, the plural ending of the Sanskrit instrumental is *bhis*=Zd. *bis*=Lat. suffix in *nobis*, *vobis*. Here too we have evidently a compound suffix composed of a singular *bhi*=Lat. *bi*, and a plural *s*. This Latin suffix fully represents the Greek $\phi\iota\nu$ (in $\delta\alpha\kappa\rho\nu\acute{o}\text{-}\phi\iota\nu$, $\vartheta\rho\epsilon\sigma\text{-}\phi\iota\nu$, etc.), which must have been originally $\phi\iota\varsigma$ =*bhis*, for $\phi\iota\varsigma$ bears the same relation to $\phi\iota\nu$, that the first person plural suffix $\mu\epsilon\varsigma$ among the verbal endings, does to the other form $\mu\epsilon\nu$. This original $\phi\iota\varsigma$ was composed of a singular $\phi\iota$ and the plural ς ; this $\phi\iota$ is now used along with the plural form $\phi\iota\nu$ without distinction for singular or plural, at one time $\phi\iota\nu$ and at another $\phi\iota$; the latter was, however, originally singular and the former plural. In the Old Latin *bus* was used in the first declension also, and at a later period to distinguish the genders—*deabus*, *filiabus*; and seldomer in the second declension—*filibus*, *amicibus*. Bopp thinks that the newer *is* of these declensions has come from *abus*, *obus*, which, in the first place, became *ibis* and then *is*, by dropping the *b*. Aufrecht, on the other hand, believes the *is* to have arisen from *ipsis*.

GOthic. The sign of the dative plural in the Gothic and O. H. G. was *m* for all nouns. In the M. H. G. the *m* is replaced by *n*. The ending *m* was attached directly to the thema in the strong declension. In the Goth. and M.H.G. the *m* of the case ending took the place of the characteristic *n* in the weak declension. In the strong adjectives the thema vowel *a* becomes *ai* in the Goth., and *é* in the O. H. G.; in the masc. nouns it is obscured, and in the fem. it becomes *ô*. The Gothic dative plural *m* is connected with the Sanskrit and Latin endings, *bhyas*, *bhis*, and *bus*, *bis*, by the corresponding Lithuanian case suffix *mus* in *mumus*=*nobis*, *yumus*=*vobis*, which appears in all other words in the syncopated form *ms*. The Gothic has accordingly softened *b* to *m*, and dropped the plural *s*: *fiskam* for *fiskams*=*piscibus*.

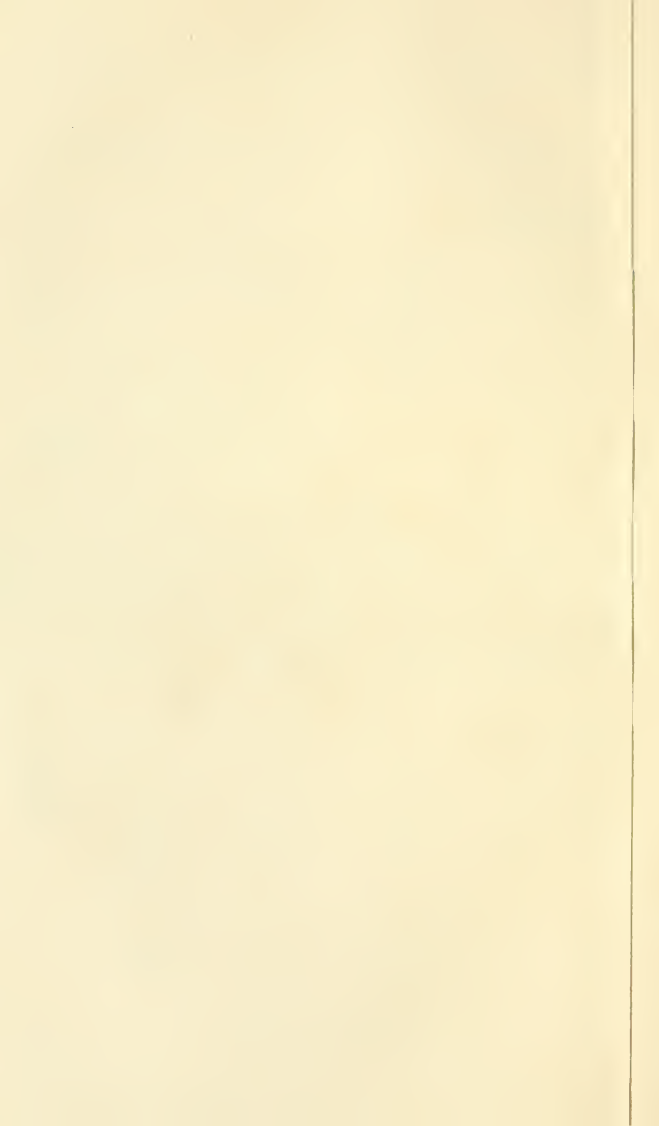
²⁰ The locative in the Umbrian appears to be formed by the addition of *em* to the accusative singular and plural, thus: acc. sing. *tutam* loc. sing. *tutam-em*; acc. plur. *tutaf* loc. plur. *tutaf-em*.

A trace of the original *ms* remains in the Old Norse forms *treimr*, *thrimr* = Lat. *duobus*, *tribus*.

LITHUANIAN AND SLAVONIAN. In Lithuanian the dative plural is formed by the addition of the pronominal ending *mus* or *ms* above-mentioned; masc. *a*-stems end, however, in *is*. In Old Slavonian the ending is *mŭ*, which is evidently a weakened and crippled form of *mus*. The Lithuanian instrumental plural ending is *mis*, which is apparently the singular ending, to which the plural *s* is added. In the Old Slavonian we have also this ending in the crippled form *mi*—the final consonant being generally lost in that language. Stems in *o* form their instrumental in *ŭ*, in which Bopp recognizes the Sanskrit *â-is*, Zd. *â-is* (in which the *b* has been lost), Lith. *a-is*; according to this, the *s* was lost and the *i* produced umlaut of the stem-vowel. Masc. and neut. *yo-* (*ya-*) stems form their instrumental in *i*. The locative plural is formed in Lithuanian by the endings *sa*, *su*, or *se*, or, as in the Lettish, more frequently by *s* only. In Old Slavonic the locative plural is formed by the pronominal genitive ending *chŭ*.

The annexed paradigm, which contains all the case-endings mentioned in the preceding pages, may be found useful in comparing the relative state of preservation of each case-ending in the different languages of the family.

	<i>Sanskrit.</i>	<i>Zend.</i>	<i>Latv.</i>
Nom. and Voc.	-s, m, -t	(-s), -m, t	-s, -m, -d.
Accusative	-m	-m, -ñm, -čm	-m
Genitive	-sya, -s, -as, -ás	-he, -hya, áo (-s), -ó	-is, -us, -i, -
Dative	-ē, -ai, -āya	-ē, -ái	{ -ī (fused to -ō (for oi)
Locative	-i, -ām, ē, au	-a ? i	_____
Instrumental	-ā (-yā), n-a	-a	_____
Ablative	-t, -as	-d, -σd	-d (when lost as the dat., ex σ is represen
Nom. Acc. and } Voc.	-au (in the Vedas -ā) -ī	-áo, -a, -i	_____
Genitive and } Locative	-ós, yós	-ó	_____
Dative } Instrumental } Ablative }	-bhyā-m	bya	_____
Nominative and } Vocative }	-as	-ô, -a	{ (-as), -a, -i -es, -a, ūs
Accusative	-s, -as, n	-ô, -ñ, -čus	-ās, -d (an forms like t
Genitive	-ām	-ai m	-rum, -um
Dative	-bhyas	-by ô	{ -bus, -is
Ablative	-bhyas		
Instrumental	-bhis, -is	-bis, -is	
Locative	-su (shu)	-hva, -sva	



ON DECLENSION
AND THE
DEGREES OF COMPARISON IN IRISH.

§. 1. *Bopp's view of the aspirations and eclipses in Modern Irish, and the modifications which it undergoes through the Old Irish forms.*

BOPP'S sagacity has never been, perhaps, so brilliantly proved, as in the discovery that the whole of the aspirations and eclipses, by which the Modern Irish declension is apparently disfigured, are nothing else than the relics and results of the after-action of the old case-endings.²¹ Zeuss' determination of the old forms of the article has confirmed this supposition in the most complete manner, as regards the *n* and the consonant aspirations; the *t* and *h* before vowels are, however, to be somewhat differently explained. After what Zeuss remarks (pp. 59 and 63),²² we cannot help regarding the *h* as, in the beginning, a useless and arbitrary

²¹ Die Celtischen Sprachen, etc. S. 22, *et seq.*

²² (a) [The passages in Zeuss are as follows:—

P. 59: "H is not found as a radical in the Irish; and if in ancient MSS., besides the combinations *ph*, *th*, *ch*, the *h* is also seen alone, which only happens at the commencement of words, it is nothing more than a breathing prefixed to the initial vowel, as in the ancient Gaulish names: Hercynia, Helvii. This *h*, neither a radical nor a necessary letter, occurs, without any fixed rule, in one place, and is not found in another; as: *uile*, *huile* (all), Wb. fq.; *éula* (wise), Wb., *heulas* (wisdom), Sg. 209^a; *aui*, *háui* (descendants), Sg. 28^a 30^b; and so on. The ancient language knows nothing of that regular usage according to which the modern dialects, Irish and Gaelic, prefix the *h* in a hiatus to the initial vowel of a substantive following the forms of the article *na* (gen. sing. fem., and nom. and dat. plur.) or preposition ending in a vowel. We find, indeed, for example, *inna hírise* (of the faith), Sg. 209^b, but also *inna idbairte* (of the offering), *inna indocbale* (of the glory), *inna anme* (of the soul), *na œilse* (of the Church), Wb. 22^c 22^b 25^c 27^a; *na accobra* (the desires), Wb. 20^c; *la Atacu* (with the men of Attica), Sg. 147^a; *a oentu* (from unity), Wb. 26^b *a albain* (from Scotland), Marian. Scot. ap. Pertz. 7, 481".

P. 63, "The *s* drops out by 'infection' in the ancient language.* The more recent language, indeed, which expresses the aspirate in its primary state as a strong *s*, almost as *ss*, pronounces the same letter when mortified or 'infected' as *h*, but I think this *h* is of still more recent origin than the *h* in a hiatus between the article or a preposition and the initial vowel of a substantive following, of which *supra*. For the ancient Irish MSS. either mark the mortified *s*, like the *f*, by a dot [the *punctum delens*, used commonly in mediæval MSS. to mark a letter written by mistake, and to be omitted], or else omit it altogether".]

* ["Infection", or "mortification", as it is called by some grammarians. Dr. O'Donovan calls it "Aspiration"; which he defines thus: "Aspiration, a grammatical accident, the general use of which distinguishes the Irish, Gaelic, and other cognate dialects of the Celtic, from all other modern languages, may be defined as the changing of the radical sounds of the consonants from being stops of the breath to a sibillance, or, from a stronger to a weaker sibillance".—O'D., Gram., p. 39-40.

addition before vowel anlauts, which, at a later period, permanently fixed itself after vowel auslauts; for the passage of *s* into *h* appears to be foreign to the Gaedhelic branch of the Celtic; in the dative plural, where *h* likewise appears before vowels, it is not *s*, but *b*, which has dropped off; for from *donabis*²³ the Modern Irish *dona* has been first developed through the Old Irish *donaib* or *donab*. On the other hand, we also frequently find the *t* (Zeuss, 55, 231, etc.)²⁴ after *n* in Old Irish, where otherwise *d* should stand, before eclipsed *s*. Hence, we cannot look upon the *t* in the nominative of the article as a substitute for *s*, but must assume that it had been prefixed to the *s* in the more ancient forms of the nominative, and afterwards remained when *s* dropped off. The Old Umbrian appears to afford a parallel to this: it never shows an *ns*, except instead of *nns* in *Palsans*, but either *nz* or *z* (*enze*=*onse*) or *s* (*neirhabas*). Accordingly, in the modern form of the language, this *t* is to be found wherever a vowel has dropped out from between *n* and *s*, equally whether the *s* belongs to the article (as in masc. *an tiasg*, the fish, instead of (*an(t)s iasg*), or the noun substantive (as in fem. *an tslat*, the rod,²⁵ instead of *an(t) slat*).²⁶ It is absent when *s* or another con-

²³ [i. Read **dunnabo* (from **du-sannabo*). Ebel's hypothetical *donabis* is due to his theory that the O. Ir. dat. plur. sprang from an instrumental (Sansk. *-bhis*). But this theory is destroyed by the Gaulish inscription of Nîmes (*Revue Archéologique*, 1858, p. 44), in which Dr. Siegfried has recognized two datives plur.—viz., *mâtrepo namausikâbo* (matribus nemausicis), which are genuine descendants of the Indo-European datives plur. in *-bhis*, Sanskr. *-bhyas*, the *i* (*y*) being ejected as in Lat. *-bus*. In *donaib* the stem-vowel *a* has been weakened into *ai*.]

²⁴ (*b*) [The passages in Zeuss are as follows:—

P. 55. "The form NT, also, occurs in forms of pronouns coalescing with the preposition *in*, but only when the preposition governs the accusative case: *inte* (= in eam, fem.) Sg. *b^a*; *intesi* (gl. in ipsam) Sg. 199^a, 209^b; *intiu* (in eos) Sg. 7^a, Ml. 21^a, 28^a. Thence we might expect for the other persons the forms: *intium* (= in me), *intiumn* (= in nos), *intit* (= in te), *intib* (= in vos), *intis* (= in eum), which I have not met with in MSS. The harder form, *int*, of the article prevails before vowels in the sing. nom. of the masc. gender, in which, after the usual form of the article, *in*, the hard form of the consonants is retained. Therefore the harder form *nt* seems to contain in itself the signification of action (motion, in the preposition), of hardness of form and of the masculine gender; the softer *nd* that of the passive (rest, in the preposition) of softening [of the letter] and of the feminine gender. It is to be observed in addition, that the form of the article *int* prevails almost always (the form *ind* is very rarely found) before the softened, or, as it is called, the 'mortified' *s* in all the cases of the three genders in which *ind* occurs before vowels (e.g. in the Article); this is, however, to be compared with the fact, that even the particle *ind* in composition (in the ancient Gaulish *ande-*) becomes *int* before a softened or mortified *s* in the following word.]

P. 231. [Gen. sing. of the article, *IN*]. "IN, aspirating, before tenues and medials; *IND* before liquids, mortified consonants, and vowels. * * * * * Instead of the regular *IND* the form *INT* also prevails before the mortified *s*, as before at p. 55 [extract, *supra*, note (²⁴)], and here: *intsechtaigtha* (gloss: "simulacionis"), Ml. 31^a; *fomam intsommai* (under a rich man's yoke), Ml. 27^d.]

²⁵ The difference between *an tiasg* and *an tslat* is only graphic, as it is pro-

sonant has dropped off; consequently, in the gen. and nom. plur. fem. *na slaite*, instead of *nás slaite*, in the nom. sing. masc. *an sruth*, the scholar, instead of *an(t)s sruth*; in the gen. plur. of both genders *na sruth*, *na slat*, instead of *nán sruth*, *nán slat*; in the dat. plur., *dona srothabh*, *dona slataibh*.

A third point in which Bopp's view undergoes a modification through the Old Irish forms, is the explanation of the nom. plur. masc., which in the Modern Irish is formed as in the fem. in *na* with *h* before vowels, and without alteration of the following consonants. Bopp thence concludes that in the Celtic the article, like the substantive, in the masc. plur. originally ended in *ás*; consequently, that *na* has been deformed out of *anás*; but the Old Irish *ind*, or *in* with an aspiration following, together with the fem. masc., *inna* or *na*, show us that here also the masc. originally ended in a vowel as in almost all the Indo-European languages; consequently, that the modern *na* owes its existence to an inorganic extension of the accusative form, or fem. plur. form, which we already find in the Old Irish neutral plural *inna*, which leaves the consonants following unaffected.²⁷

With the exception of these three points, the old forms confirm throughout Bopp's discovery, according to which the nomin. sing. masc., the gen. sing., and the nom. pl. fem., from their very origin ended in *s*; the gen. plur. in *n*; the gen. and dat. masc., and nom. and dat. fem. sing., in vowels.

The finding of the neuter, which has disappeared without leaving a trace in the New Celtic (*an* or *a* in the nominative and accusative singular, and the plural like the genitive), and of the accusative (replaced in the Modern Irish by the nominative), in the Old Irish forms *inn* (before consonants *in*) in the masculine and feminine singular, *inna* or *na* in the plural of all three genders,—and in which we can still plainly recognize the original ending *-n* in the singular, and *-s* in the plural,—is an important enrichment of Celtic grammar.

I hazard no supposition as to the relation of the old forms with *i*, followed by *nt*, *nd*, *nn*, to the new with *a* and simple *n*; the vowels of the endings can only be determined through a comparison of the substantive-declension, to which we shall now proceed.

§. 2. *Stems which belong to the several orders and series of Zeuss.*

The philologist recognizes at first sight, in the first order

nounced *an tlat*, as in accurate writing even in the Old Irish *s* is provided with a dot or left out, not only in this case but also after vowels.—Zeuss, 63.

²⁶ [ii. The *t* in the nom. sing. masc. of the Irish article has been since shown to be due to the law, pursuant to which, in Old Irish, *d* becomes *t* before aspirated *s*, *an tiasg*, in O. Ir. *intiasc*=an Old Celtic *san(d)as*+*éscas*, subsequently *indshêsc*=*intiasc*.]

²⁷ [See *infra*, §. 11. On the Article in Modern Irish, p. 88.]

(*Ordo Prior*) of Zeuss (App. I., p. 169), a vocali *e* (or a consonantal changed into a vocalic) declension, in the second order (*Ordo Posterior*), consonantal stems; among the latter, the masculine and the feminine *n*-stems and nouns of relationship in *-thir* (= Sanskrit *-tar*) being especially evident, as had been already recognized and put forward by Pictet and Bopp. On the other hand, I cannot, from external and internal grounds, agree with both these masters in the distribution of the vocalic-stems.

Namely, if we compare the first paradigm or table of Zeuss with the second, his remark, that the first is external, and the second internal inflexion, is at once seen to be incorrect. We have only to take, instead of *ball*, a word with *e*—as, for example, *fer*, man—in order to at once see that the declension of *cèle* (companion) does not at all differ in the main from that of *fer*, except that in the former a vowel preceded the dropped off ending, in the latter a consonant. The vowel of the original penultimate undergoes in both the same changes: nom. and acc. sing. and gen. plur. *cèle*, like *fer*, gen. and voc. sing. and nom. plur. *céli*, as *fir*, dat. sing. *céliu* as *fir*, acc. plur. *céliu* as *firu*: it is only in the dative plural that a slight difference occurs between *célib* and *feraib*. In short, I. is only a variety of II., and both are related to one another, like the Gothic *haryis* or *hairdeis* to *fisks*. Let us, therefore, assume for a moment that I. contains *ya*-stems, II., *a*-stems; there remain for III. *u* and *i*-stems. But a similar relation to that between I. and II. also occurs in the feminine between IV. and V., and the differences in the paradigm between *tuare* and *rainne* in the genitive singular, *tuari* and *ranna* in the nom. and acc. plur., are compensated by the secondary forms of the fifth, which we find under the examples gen. sing. *-a* and *-o*, nom. and acc. plur. *-e* and *-i*. We could here also assume in the fourth *yâ*-stems, in the fifth *â*-stems, and have only to determine then what has become of the *i* or *î*-stems, in order to remove the objection which could be raised upon external grounds against such a division; for, if feminine *u*-stems are wanting, there is nothing remarkable in the circumstance. We shall again find the feminine *i*-stems under V.; the *î*-stems have, however, either become *ya* or *i*-stems. We find many stems, originally consonantal, changed into III. (exactly as in Latin in the *i*-declension): e.g., *âis*, *ôis* (actas) = Sanskrit *âyus*, gen. *aiisso*, *ôesa*.²⁸ The feminine *nem*²⁹ (cælum) = Sanskrit *nabhas*, gen. *nime*,

²⁸ [iii. It is impossible to equate *âis* with *âyus*, final *s* being never retained in Irish, not even in the *ns*-stems.]

²⁹ [iv. *Nem* (also *nim*) was an *i*-stem—not an *â*-stem—as we see from the Old Irish gen. plur. *nime* in *Oingus Céle Dé*:—

Sén á Christ mo labrad
a choindiu secht *nime*.

“Bless, O Christ, my utterance,
O Lord of seven heavens!”]

according to V., reminds us of the Slavic forms mentioned in the *Zeitschrift für vergleichende Sprachforschung*, iv. 342: *voda* = Sanskrit *udan*, *gora* = ὄρος, *tīma* = Sanskrit *tamas*. If, accordingly, we designate the five series set up by Zeuss as: I. *b.* masculine and neutral *ya*-stems; I. *a.* masculine and neutral *a*-stems; II. masculine and neutral *i* and *u*-stems; III. *b.* feminine *yá*-stems; III. *a.* feminine *á* and *i*-stems, we shall find that this classification will receive an external confirmation by a consideration of the words and suffixes which belong to the several classes.

First, most loan-words harmonize, in the most strikingly accurate manner, with their types in the declension. Compare, for example, the *a*-stems—*felsub* = philosophus, *ór* = aurum,³⁰ *angel* = angelus, *apstal* = apostolus, *epscop* = episcopus, *fial* = velum, *idol* m. = idolum, *ifurnm* = infernum, *salm* = psalmus, *tempul* = templum, together with the genitive *digaim* = digammi, *metir* = metri; the *á*-stems—(*almsin*?³¹ = eleemosyna, *epistil*? = epistola) *persan* = persona, *riagol riagul* = regula, *pian* = pœna, *fedb* = vidua (no doubt borrowed?) *liter* = litera, *sillab* = syllaba; those in *ia* and *iá*—the masculine *notaire*, *rectaire*, *tablaire*, the feminine *fellsube* = philosophia; those in *i*—the masculine *fúith* = vates; in *u*—the masculine *fers* = versus, *sens* = sensus, *spirut* (gen. *spirito*, *spiruto*) = spiritus. Proper names follow the same rule, such as *róm*, fem. = Roma, *román*, mas. = Romanus, *tít* = titus, *tiamthe* = Timotheus, *grec* = Græcus, although I. *a.* has here encroached rather more, as the dat. *aeneus*, gen. *adim*, *Socrait*, *Aristotil*, show.

The forms of the cognate languages afford a further confirmation, and so do now and then also traditional Gaulish words. *Fer* (stem *fira*) corresponds to the Sanskrit *vīra* still more accurately than the Latin *vir* and Gothic *vair* (instead of *vir* stem *vira*);³² the adjective *fír* to the Latin *verus* (compare *ríg*³³ = Latin *rex*); *óin óen* to the Latin *unus*; *marb* to the Latin *mortuus* (*b* = *tv*);³⁴ *fescor fescar*, masc. to the Lithuanian *vakaras*, Latin *vesper*; *bran*, raven, to the Slavonian *vranŭ*, Lithuanian *varnas* (Sanskrit *varna*); *rún* fem. to the Gothic *runa*; *dia* masc., the anomaly of which is only apparent, to the Latin *Deus* (instead of *Dēus* = Sanskrit *dēva*); *fere* fem. probably to the Greek ὄργή; *tuath* fem. to the Oscan *tovto*, Umbrian *toto*; *anim*, fem., from

³⁰ [v. *ór* is even found with the *n* of the neuter termination in the nom. sing. *ór nglan* (pure gold), where *ór n* is exactly the Greek αἶνον.]

³¹ [vi. Rectè *almsan*: *epistil* is right—the *i* in the last syllable being due to progressive assimilation—a phenomenon which Irish exhibits in common with Finnish and Magyar.]

³² The Lithuanian form *wyras*, and the rarity of the Latin *i*, instead of *a*, before *r*, speaks more in favour of *vīra* than of *vara*.

³³ [vii. Rectè *rí* = Gaulish *rīx*, a *g*-stem.]

³⁴ [viii. The *b* in *marb*, now *marbh*, is a *v*. *marb* = **marva*, Welsh, *marw*.]

which several cases are formed according to III. *a.* (Zeitschrift f. vergl. Sp. vi. 213), and which corresponds in these to the Latin *anima*; *lán* to the Latin *plenus* (see *supra*); *colum* to the Latin *columba*,³⁵ *ardd*, probably, to the Latin *arduus*; *nú*³⁶ to the Latin *novus* = Sanskrit *nava*, on the other hand, *nue* is related to the Gothic *niujis* = Sanskrit *navya*; *aile* to the Latin *alius*; consequently we may refer *uile* to Gothic *alls* by assimilation from *lj*: the neuter *eride* represents exactly the Sanskrit *hrdaya* (less accurately the Greek *καρδία*), *tréde* neut. (the Trinity) the Sanskrit *tritaya*; *muir* shows itself by the Gaulish *mori-* to be an *i*-stem, which, notwithstanding small deviations, the Latin *mare*, Slav. *more*, Gothic *marei*, confirm; *mug* (servus) appears to be identical with the Gothic *magus* (puer), and consequently an *u*-stem; *fid* neut. (arbor) resembles the Old Saxon *widu*, Anglo-Saxon *wudu*, Old High German *witu* (Old Norse masc. *viðr*), and besides is shown by the Gaulish *vidu* to be a *u*-stem, like *cath* (pugna), *bith* (mundus) by the Gaulish *catu-*, *bitu-*; the fem. *sét* (dat. *sét*, pl. *seúit*) *via* = Gothic *sinþs*, like *dét* (dat. *déit* = Lat. *dens*), fluctuates between *i*- and a consonantal declension; finally the double forms *ben* and *ban* (mulier) may be explained either from **gvina*³⁷ (= Gothic *qvinô*) and **gvano* (= Greek *γυνή*, Bæot. *βάνα*) or from **gvani* (= Sanskrit *jani*) and **gvana* (exactly as the Slav. *žena* can have been formed from *žana* or *žina*).

But even if we considered these agreements as merely accidental, much more would the identity of the suffixes come out. The adjectives come almost without exception under the classes I. *a.* and *b.* in masc. and neut. III. *a.* and *b.* in femin., consequently to *a*- and *yâ*-stems, which in all the Indo-European languages are the most numerous. The superlatives end in *-em*, of which I have found no inflexions in Zeuss, and are probably derived from *ima*, or *am*, certainly from *-ama*, which is inflected according to I. *a.* Of the adjectives the fem. abstracts in *-e* are very generally formed according to III. *b.*, which corresponds to the Sanskrit *yâ*, Lat. *-ia*, Greek *-ia*, Old High Germ. *-î*, Middle High German *-e*, e.g., *amprome* (improbitas) from *amprom*, *sulbaire* (eloquentia) from *sulber*, *dóire* (miseria) from *dóir*, *soire* (nobilitas) from *sóir*, *fírinne* (justitia) from *fírian*, *luinde*, bitterness, from *lond*, *nóibe* (sanctitas) from *nóib*, etc. Among the masc. in *-e* (I. *b.*) the words in *-ire* or *-aire*, corresponding to the Slav. *-arŭ*, as *echire*, *echaire* (mulio), and many loan-words (from the Lat.

³⁵ [ix. *Colum* (rectè *colomb*), gen. *coluimb*, is a masc. *a*-stem, not fem. like *columba*.]

³⁶ [x. Rectè *núa*. The nom. plur. of *sét* (see below) has the masc. article in Zeuss, p. 237.]

³⁷ [All words to which an asterisk is prefixed are hypothetical.]

-arius) distinguish themselves; among the adjectives those in *-de* = Sanskrit *-tya*, only of larger use, *e.g.* *nemde* (coelestis), *talmande* (terrestris), *colnide* (carnalis), etc.; the Sanskrit *-taya* occurs in the numeral adjectives *déde*, *tréde* corresponding also in gender to the Sanskrit *tritaya*, *catushtaya*. We must, therefore, accordingly compare the modern fem. in *-mhuin*, as produced from the older *-maine*, not with the Sanskrit neuter in *-man*, but with the Latin fem. in *-monia* (*seachmuin* = *sechtmaine*, consequently not accurately corresponding to the Lat. *septimana*), especially as even the Old Irish already sometimes exhibits retrenchment, as *testemin*, *festimin* stands by the side of the Lat. *testimonium*, the neut. *aill* by that of the mas. *aile* = *alius*.

The verbal substantives, which take the place of the infinitive, are particularly interesting. Those of them that apparently contain the naked root, as *cumang* (posse, potentia), *fulang* (tolerare), may be recognized by their declension according to I. *a.*, as *a*-stems, to which the Sanskrit gerund in *-am*, and the locative in *-é*, by which the Indian grammarians frequently explain the roots, are parallel. Pictet (De l'affinité des Langues Celtiques avec le Sanskrit, p. 161) compares the infinitive in *t*, *th*, *d*, *dh*, with the Sanskrit *-tum*; Bopp (p. 56) rather with the Slavonic *-ti*, especially because of the form *tinn*; we find among the suffixes in Pictet, the Irish *adh* compared with the Sanskrit *-athu*. We shall become acquainted with *tinn* further on under consonantal declension; about the other forms the Old Irish supplies us with information. There *-ad* and *-ud* follow the second mode of inflexion, *-t* the third; we are consequently the more entitled to presuppose in the former two suffixes *u*-stems (like the Lat. *-tus*, from which the supine, Sanskrit *-tu*, from which the infinitive and gerund *-tum*, *-tvā*), as, according to the latest statements of Schleicher (Beiträge, I. 27), even the Slavonic infinitive in *-ti* belongs to this formation; on the other hand, the feminine forms in *-t* (according to III. *a.*) are not to be separated from the feminine abstracts in Sanskrit *-ti*, Greek *-τι* (*σί*), Lat. *-ti* (*si*), Gothic *-ti*, *pi*, *di*. The feminines in *-ál* (III. *a.*) remind us of the peculiar Slavonic participles in *-lŭ*; but it would be difficult to decide whether *-ā* or *-i* has dropped off in them. The feminine in *-em* are *a*-stems, which correspond to the Greek verbal-nouns in *-μη*; the masculine in *-am*, *-om*, *-um*, remain obscure to me. Finally, *-ent*, *-end*, according to I. *a.*, I consider to be borrowed, a supposition to which the forms *legend*, *scribend*, already point. The masculines in *-id*, gen. *-ada*, in which Zeuss, p. 766, suspected an original *-at*, still deserve to be mentioned; the proper stem-ending is *-ati*, absolutely like the Sanskrit *-ti*, Greek *τι* (in *μάντις*), only differently

employed, as it appears in the Irish, as a taddhita suffix.³⁸ The part. perf. pass. appears to be the only exception to this regular correspondence with the cognate languages: they do not end in *-th* or *-d*, according to I. *a.*, as the analogy with the Sanskrit, Greek, Latin, and Gothic would lead to, but in *-the*, according to I. *b.*; but the original form still lies before us in the preterite passive of the impersonal conjugation (sing. *-d*, plur. *-tha*); we have consequently to recognize in the ordinary form an addition (*-ya* or *-aya*) similar to that in the Old Welsh *-etic*. On the other hand, the part. fut. pass. *-thi*, properly *-thí*, accurately links itself to the Sanskrit *-tavya*, Greek *-τέος* (Lat. *-tivus*).

If, finally, we compare the forms of the article, which, according to Bopp's view, also belong to an *a*-stem, and exactly agree with the stems in I. *a* in the distinguishing cases, gen. sing. and nom. pl. masc., there will be found sufficient external grounds to justify our division. We shall now pass to the inner characteristics which exist in the Irish phonetic relations, in order to develop and explain, as far as possible, the individual forms.

§. 3. *Test afforded by Irish Phonology for determining inductively the Primitive Forms of the Celtic Case-Endings.*

The Irish vocal system exhibits two very close points of contact with the German, the unlaut or obscuring of an *a* by *i* and *u*, and the fracture of an *i* and *u* by *a*. In reference to the first, it is particularly remarkable that the three kinds of assimilation of the *a* before *i* and *u*, which we generally find separated in different languages and language-periods (complete assimilation as in the Sanskrit *giri* and *guru*, diphthongation as in the Zend, *pairi* and *pauru*, unlaut proper as in the Old Norse *hendi* and *hönd*), appear here side by side; thus the well-known particle *ar* is written *air*-, *ir*-, *er*- [and *aur*-]; the accusative plural of *ball*, at one time *bullu*, at another *baullu*; *rolaumur* (audeo) also *rolomur*. As unlauts of *a* there consequently occur:—1, *ai* or *i*, more rarely *e*; 2, *au* or *u*, more rarely *o*; inversely *i* changes into *e*, *o* into *u*, under the influence of an *a* following, as in the Old High German; thus, for example, in the gen. *feda*, *moga* from *fid*, *mug*. We may see how far the last law has extended itself, from the fact that it has even invaded foreign names, as *etal*=Italy; but when Zeuss ascribes the same influence to a succeeding *o* and *u*, it should be considered that *o* and *a* often interchange, as in the gen. *etha* or *etho* from *ith*, where the *e* owes its origin rather to the *a* than to the *o*; but, on the other hand, *o* and *e* arise from simple weakening—namely, before double consonants,

³⁸ [So the Indian grammarians call the secondary suffixes.]

so probably also in *felsub* = philosophus.³⁹ We can just as little recognize an unlaut of the *e* into *i*, for where we have reason to consider *e* as primitive, there is produced by a succeeding *i* or *u*, not *i* or *iu*, but *ei* or *eu*, for example, in the plural *geinti* (gentes) in the dat. *neurt*, from *nert* (virtus, valor).⁴⁰ Zeuss has proceeded in a one-sided manner, inasmuch as he has everywhere taken the vowel which appears in the nominative as the primitive one; while, in cases like *nine*, *giun*, it is rather the *i* changed into *e* by *a* that again appears. On the other hand, it must be admitted that unlaut is sometimes produced by an *e* not derived from *i*, as in gen. *rainne* from *rann* (pars). According to this, the rule for the Old Irish (we pass over here the vowel changes in the Modern Irish, and slight deviations, such as *oi* for *ai*, *ea*, *eo*, for *ao*) may be expressed somewhat as follows: under the influence of a succeeding *a*, *i* changes itself into *e*, *u* into *o*; under that of a succeeding *i* (exceptionally also an *e*), *a* into *i* or *ai* (or *e*), *e* into *ei*, *u* into *ui*, *o* into *oi*; finally, under that of a succeeding *u*, *a* into *u* or *au* (or *o*), *i* into *iu*, *e* into *eu*. It is unnecessary to observe that the factor very often disappears, and the fact remains, so that, just as in German, we can determine by the vowel-changes in the stem the vowel of the ending, a circumstance of so much the more importance, because it will soon appear that the Irish, even in its oldest form, is much more weakened in the auslauts than, for instance, the Gothic.

If we apply the rule just given to determine the vowels of these endings, we obtain, in the first instance, for the masculine and neuter, according to I., the following endings:—

Sing. Nom.	-(a)s, -(a)n	.	.	Plur.	-i, -ā
Acc.	-(a)n	.	.		-ū, -ā
Gen.	-i	.	.		-an
Dat.	-u	.	.		-abis ⁴¹

Examples: *ball* (membrum) *ball*, *baill*, *baull* or *bull*, *baill ballaib* or *ballib*; *fer* (vir), *fer*, *fir*, *fiur*, *fir*, *firu*, *fer*, *feraib*;

³⁹ [xi. Here (at least as to the breaking of *i* into *e* by *o*) Zeuss seems right and Ebel wrong. Thus:

Bretan=Brito (Book of Armagh); lenomnaib (litoris), Zeuss, 739, compare Lat. *lino*; lebor from liber (Zeuss, 744); senod (Cormac), from synodus (y=i) cenel=ceneth(o)l=Old Welsh cenitol.]

⁴⁰ [xii. *E* seems changed into *i* by a succeeding *i* in the following instances:—Aristotil (gen. sing.), Zeuss, 887, magistir, nom. pl. of magister, Zeuss, 1057, heritic (=haeretici) Zeuss, 1055.]

⁴¹ [xiii. Regarding the remarks in notes 23 and 39, the hypothetical endings for the masc. and neut. may be set down as follows:

Sing. nom.	. . . os, on	Plur.	i, ā
acc.	. . . on		ūs, ā
dat.	. . . u		ābo (abo?)
gen.	. . . i		ān

and these agree with the Gaulish endings of the *a*-declension, so far as they have been established.]

neuter, *inned* (tribulation), pl. *innetha inneda*. We recognize here distinctly the *a*-stem *balla*, *jera* instead of *fira*, *innetha* instead of *innitha*; *fira* harmonizes in a remarkably beautiful manner with the Gothic and Latin stem *vira* (for *vair* indicates a previous short *i*) in opposition to the Sanskrit *vira*. The feminine *a*-stems lead back to:—

Sing. Nom.	-a	.	.	.	Plur.	-ās
Acc.	-an	.	.	.		-ās
Gen.	-ē(s) or -(ā)s	.	.	.		-an
Dat.	-i or e	.	.	.		-abis

Examples: *nem* (heaven), *nem*, *nime*, *nim* (stem *nimā*, hence the nom. *nim* is still found singly); *delb* (effigies), *delb*, *delbe*, *deilb*, plur. *delbæ* (instead of *delba*), gen. *delb*, dat. *delbaib*, with primitive *e*, therefore it is in the dative not *dilb*, but *deilb*. The masculine stems, according to III., exhibit, in the immediately preceding stage approximately the following forms:—

Sing. Nom.	(-is or -us)	.	.	Plur.	-ā(s), -ē(s), ī(s)
Acc.	(-i or -un)	.	.		-ā -i
Gen.	ā(s) or ō(s)	.	.		-ē(n)
Dat.	u? or -i?	.	.		-ibis (-abis?)

Examples: nom. *dénmid* (doer) instead of *dénmadis*, gen. *denmada*; nom. *bith* (world), dat. *biuth* instead of *bithu*; *gnim* (action) acc. plur. *gnimu*; *aitribthid* (possessor), gen. *aitrebthado*, nom. acc. plur. *aitribthidi*.

It is easily seen that the forms which are attainable by immediate conclusion, do not admit, in any way, of a direct comparison with the primitive forms, as the Gothic, to a certain extent, do, but still require an intermediate stage to connect them. A *baill ballú*, or *ballui*, must necessarily have preceded *balli*, *ballu*, assumed from *baill*, *baull*, a *nimā* the *nima*, deduced from *nem*, a *firús* (or *firún*?) the *firú* changed into *firu*, a *firán*, the hypothetical *firan* in the gen. pl. In short, the oldest historical forms of the Irish, in regard to the conservation of the auslaut, stand, at most, and even scarcely, upon a level with the New High German,⁴² as the simple comparison of the Irish and the German *ball* may show:—

Sing.	{ Irish, . . .	Nom. ball,	Acc. ball,	Gen. baill,	Dat. baull.
	{ German, . . .	ball,	ball,	ball(e)s,	ball(e).
Plur.	{ Irish, . . .	baill,	baullu,	ball,	ballaib.
	{ German, . . .	bälle,	bälle,	bälle,	bällen.

We find that long vowels have disappeared in the auslaut often even with succeeding consonants; equally so, short vowels, with succeeding *s*; only long vowels before *s* have preserved

⁴² [xiv. Ebel would not now say this. See, *infra*, "On the so-called prosthetic *n*", §. 12, p. 90.]

themselves in a shortened form : (forms such as *céle* (socius), consequently presuppose either a *célias*, *céleas*, with a fallen off end-syllable, or a *célés* with a shortening of the vowel before the fallen off *s*; we shall more correctly explain *fíru* from *fírús* than from *fírín*, as we everywhere [except in the article and *teora n*] see that the long vowel in the genitive plural has disappeared along with the *n*). We could not, in view of such mutilation of the original endings, venture to think of anything like a satisfactory development of the case-endings, were it not that fortunately the above-mentioned law for the vocalism, and the changing of the consonants between the article and substantive, puts into our hands a test.

The end-consonants, except *m* and *r*, have evidently all disappeared; *m* is changed, according to rule, into *n*, only traces of which have, still, been preserved;⁴³ *s* no longer occurs at the end; *t*, which appears in its place in the Old Irish as *int*, and in the Modern Irish *an t*, shows us that it has only disappeared in the immediately preceding period, only after the dropping out of the short vowel. *The Gaedhelic has, consequently, been harder than the Gothic, in so far that, besides s and r, it also suffered an n in its auslaut, probably derived, however, from m, not a primitive n.*⁴⁴ Of these three consonants, *s* was the first which dropped off, for it does not appear in any declension or conjugation-ending; not even in the article, where, however, its former existence is betrayed by the *t* in the nom. INT *ant*, and by the conservation of the original anlaut after the form INNA *na*; the second that dropped off was the *n* derived from *m*, which is still visible at least in the article in the acc. INX, and in gen. plur. INNAN *nan* (besides here and there also, e.g. in *teora ngutte*, Zeuss. 310); *r* has preserved itself to the present day in the nominative ATHIR *athair* (pater).

The mutilations of the auslaut appear to have taken place in this wise; in the first place the short vowels in the auslaut and before consonants were dropped, the long ones in the auslaut shortened, then (or also contemporaneously, a supposition to which the Lat. *-um*, instead of *-ûm*, would lead us) the long vowels before *n* were shortened, hereupon *s* dropped, finally the long vowel was again shortened, and the short vowel together with *n* dropped. From the primitive Gaedhelic to the Gaedhelic of the oldest monuments, we would have, consequently, to presuppose three or four periods, which may be represented by an example, somewhat in the following manner:—

⁴³ [xiv. See the last mentioned paper.]

⁴⁴ [See on this passage the author's paper referred to in the last two notes.]

	<i>Primitive period.</i>	<i>Pre-historic period.</i>	<i>Historic period.</i>
Sing. Nom. . . .	ballas,	balls,	ball.
Acc.	ballan,	balln,	ball.
Gen.	balli,	balli,	baill.
Dat.	ballui, (ballû?)	ballu,	baull.
Plur. Nom. . . .	balli,	balli,	baill.
Acc.	ballûs,	ballû,	baullu.
Gen.	ballân,	ballan,	ball.
Dat.	ballabis,	ball(a)bis,	ball(a)ib.

Still later weakenings of the auslaut sometimes occur, as the Old Gaedhelic shows in neut. *aill* from *aile* (similar to the Old Latin *alid*); the Old Kymric especially distinguishes itself from the Gaedhelic by greater weakenings, *e. g.* as *all* (*alius*) and *oll* (*omnis*), instead of the Gaedhelic *aile* and *uile*. The adjective in the Welsh exhibits an interesting difference, inasmuch as here the change of *i* and *u* into *e* and *o* first takes place in the feminine, hence a fem. *gwen*, *cron* is opposed to the mas. *gwyn* (*albus*) *crwn* (*rotundus*). We may consequently presume that in the Welsh the fracture was only introduced when the short end-vowels were thrown off, consequently *crunnas* *crunnâ* were already become *crunnu(s)* *crunna*, whilst, in the Gaedhelic, the falling off only followed the introduction of the fracture.

§. 4. Declension of consonantal stems.

Now only are we in a position to attempt an explanation of the endings; but, in consequence of the extremely difficult *i*- and *u*-stems, we shall begin with the declension of the consonantal stems. We find in Zeuss five classes (not exactly in the most convenient order), of which I. and II. contain *n*-stems, III. and V. *r*-stems, IV. *d*-stems;⁴⁵ of these *d* appears to have arisen out of *t*. The inflexion is most regular in the masculine-feminine *n*-stems (II.), and in the masculine *d*-stems (IV.). Both subdivide themselves according to the vowel of the genitive into two divisions, in which we recognize, according to the phonetic laws of the Irish, stems with *a* and with *i*; those in *-man* may be compared with the Sanskrit *-man*, *-iman*, *-van*, and with the Greek *-μῶν* (compare *brithem* judge and ἡγεμῶν); those in *-tin* or *-sin* are, in a similar way, as in the Umbrian and Oscan, shortened from *-tian*, which again appears in the nom. *-tiu*, and consequently express the Lat. *-tio*, *-tionis*, with which they also agree in gender; the infinitive use of these abstracts (comp. Zeuss, 462) explains the infinitives in

⁴⁵ [xv. Zeuss' series V. contains *c*-stems (in some instances *i*-stems, which, in the oblique cases, go over to the *c*-declension), and under his fourth series he has put *d*-stems, *t*-stems, and *ant*-stems. Among his irregular nouns he gives *ri*, gen. *rig*, the sole example of an Irish *g*-stem. *Mi*: (a month) gen. *mís*, is a *ns*-stem. So were the comparatives in *iū*, Sanskrit *iyâns*, though undeclined in the oldest Irish.]

-tinn, *-sinn* of the present language, which consequently are not at all directly connected with those in *-t* and *-dh*; probably a similar contraction of the stem lies at the basis of those in *-id*, because in the nominative along with *ogi* (hospes), *jili* (poëta), *tene* (ignis), the fuller form *cóimdiu* (dominus) shows itself. Analysis yields the common endings:—

Sing. Nom. (long vowel)	.	.	.	Plur. <i>-is</i>
Ac. <i>-in</i> (<i>-en</i>)	.	.	.	<i>-ás</i>
Gen. <i>-as</i>	.	.	.	<i>-án</i> (<i>-an</i>)
Dat. <i>-i</i>	.	.	.	<i>-abis</i>

Which explain themselves without difficulty. The length in the accusative plural is remarkable; it is proved by *anmana* (animas), *fileda* (poëtas). As a change into the vowel-declension (like in the Latin *-és*, *-eis*, *-is*) in consequence of the *a*, in opposition to the *-u* or *-i*, which alone occurs in masc. vocalic stems, is not to be thought of, this *-á* must be either an inorganic lengthening, or *-ás* has been produced from *-ans*, which has been already surmised to be the original ending of the accusative plural (Zeitschrift f. v. Sprachforschung I. 291, V. 63); the latter is probably the true explanation. Among the other endings, *-as* is remarkable by the peculiar tincture of the Gaedhelic vocalismus. For while the Greek, Latin, and Gothic agree in the weakening of the *a* in the genitive *-oc*, *-us*, *-is*, *-is*, in contrast with this in the Gothic even the nom. plur. *-as* remains pure, the Gaedhelic, on the other hand, in direct antithesis to the Gothic, has retained the genitive pure,—hence *menman*, *noiden*, *druad*, *coimded*, instead of *menmanas*, *noidinas*, *druadas*, *coimdidas*, and has weakened the nom. plur. to *-is* (or *-es* like Greek *-ες*?) consequently forming *anmin*, *aisndisin*, *druid*, *jilid*. The accusative singular with its *-in* or (*-en*) may be compared with the Lat. *-em*,—in the Zend, even with *a*-stems, *ēm*,—hence *menmain* (for which also *menmuin* and *menmin*), *airitin*, *torbataid* or *-tid*, *coimdid*. The genitive plural has, of course, first shortened its *-án* to *an*, and then dropped it; the dative singular may, probably, be referred as in the Greek and Gothic to the original locative. By the dropping off of the endings and the influence of the end-vowels, the gen. sing. and plur. on the one side, and the acc. and dat. sing. and nom. plur. on the other, of necessity became alike in sound. The dat. plur. took up a copulative vowel, as in the Latin and Gothic, an *a*, which by the influence of the dropped *i* has become *ai* or *i*; before this *-aib*, *-ib*, syncope frequently occurred as before the *-a* of the accusative plural, *e. g.* in *traighthib* (pedibus), always as it appears in the feminines in *-tiu*, the *i* of which, however, has acted upon the succeeding vowel; hence dat. *-tnib*, acc. *-tnea* or *tne*. Zeuss' supposition of an accusative plural **druida*, for which

we might expect **druada*, appears to be erroneous.⁴⁶ We meet with various forms in the nom. sing. of *an*-stems, *e. g.*: masc. *menme* (mens), masc. *brithem* (judex) fem. *anim* (anima), fem. *talam* (terra); of the feminine *in*-stems passing into *iu*, sometimes weakened into *-u*; of the masc. *ad*-stems as a rule weakened to *-u*, and in *tenge* (lingua) to *e*; of *-id* generally *-i*, also, however, *-iu* in *coimdiu* (Dominus), *-u* in *dinu* (agna), and the adjective *bibdu* (guilty), *-e* in *tene* (ignis), gen. *tened*, stem *tenid* (instead of *tanid* as the Kymric *tan* shows); no ending in *traig* (pes). The form *druith* (druida),⁴⁷ from the stem *druad*, appears to depend upon the same transition into the *i*-declension as Lat. *canis*, *juvenis*, from the stem *can*, *juven*; for *druith* points back to **druadis*. According to the analogy of the Sanskrit, the *an*-stems should have formed the nom. *-â*, which first was weakened to *a*, then fell off; *brithem*, *anim*, are, consequently, forms perfectly in accordance with rule. The preservation of the vowel in *menme*, weakened, however, to *e*, appears to have been caused by the double consonants (as, perhaps, also in the gen. pl. *athre*, from *athir*, see further on). The *-iu* of the *in*-stems has arisen from the primitive *-iû* (by passing through *-ia* or *iû*; the Lat. *-io*, Umbrian *-iu* speaks in favour of the latter), the *u* having been retained probably by means of the preceding vowel as in the dative *céliu*, as opposed to *baull*. The *d*- or *t*-stems probably took originally, as in the Lat. and Greek, an *s*, lengthened the vowel before it as compensation for the *t*, and retained the shortened vowel after the dropping off of the *s*; *e. g.* **domnats* (*domnâs*) **domnûs*, **domnú*, *domnu* (profunditas). Or *-ad* was originally long, as shortening often takes place in the Gaedhelic, for example, in the adjectives in *-ach* = Kymric *auc*, *awc* (i. e. *âc*)? In *coimdid*, together with *coimdiu*, shortening of the base of the stem may be assumed as the Welsh masc. in *-iat* (*-iad*, pl. *-ieid*), given by Zeuss (p. 806) come very near. *Guiliat* (qui videt) especially appears nearly to correspond to the Gaedhelic *filid*,⁴⁸ the nom. *fili* would, consequently, be contracted from *filiu*, for which the dative *duini* together with *duiniu* affords an analogy.⁴⁹ *Traig* shows itself to be a *t*-stem by Welsh *troet*, pl.

⁴⁶ [xvi. *Druide* is the acc. pl. in the Liber Hymnorum. This may perhaps have arisen, by progressive unlant, from **druadi*, if *druí* (like *bráthair*) have passed over to the *i*-declension. The acc. pl. *bráithre* occurs in the epilogue to the Féilire (609).]

⁴⁷ [xvii. Ebel has here been misled by Zeuss: *druith* is the nom. dual, not the nom. singular, which must have been *druí* (= **druad*(*d*)-s).]

⁴⁸ [See "Note on *a*-, *i*-, *d*-, *t*- and *nt*-stems", § 9, p. 83.]

⁴⁹ Zeuss, 755, considers the *d* as primitive, and compares the Kymric *-ed*, *-id*, p. 803; but, in my opinion, the masculine in *-id* ought rather to be compared with the Gaedhelic in *-id*, *-aid*, gen. *-ada*, and the Kymric *-d* (now *-dd*); although

traet; Cornish *troy*s, pl. *troyes*, *treys*; Armor. *troad*, pl. *treid*; but the nom. sing. *traig* and accus. plur. *traigid* are difficult to explain: the best way is, perhaps, by the assumption of a neuter (Zeuss, 274), by which the want of the ending would be justified; but the *i* in *traigid* is remarkable: we should have expected **traigidá*, **traigeda*, *traiged*. Other deviations will be treated of hereafter; as regards *cú* (canis), whereof only the comp. *banchu* (bitch), and the derivative *conde* (caninus), occur in Zeuss, we may ascribe to the Old Irish the forms: acc. *cuin*, gen. *con*, dat. *cuin*; plur. nom. *cuin*, ac. *cona*, gen. *con*, dat. *conaib*.⁵⁰ The neutral *n*-stems (I.) all derived with the suffix *-man* deviate from the expected form:—

Sing. Nom. and Acc.	<i>-m</i>	.	.	Plur.	<i>-man</i> (from <i>-maná</i> , <i>mana</i>)
Gen.	* <i>-man</i>	.	.		<i>-man</i>
Dat.	* <i>-main</i>	.	.		<i>-manaib</i>

Putting aside slight fluctuations between *a* and *e* (e.g. nom. plur. *ingramman*, gen. *ingremmen*) in the gen. and dat. sing., the dative exhibits an exceptional *m* instead of *n*: *anmim*, *anmain* (nomini), which appears to have arisen from assimilation; the gen. *auma*, *anmae*, *anme*, has dropped the *n*. The remaining forms are made in a perfectly normal manner, but the nom. sing. appears to have weakened the *a* of the original end *-ma* to *i*, before it fell off, because of the continual occurrence ofumlauts: *ainm* (nomen), *béim* (plaga), *ingreim* (persecutio), *teidm* (pestis), *togairm* (vocatio), *senim* (sonitus).

The nouns of relationship in *-thar* (III.) contain the original *á* of the nom. sing. weakened to *i*, either by the influence of the liquids (Bopp, p. 7), or, as appears to me more probable, because the *á* weakened to *a* should have dropped out in the third period (as in *ballán*, *ballan*, *ball*); but this could not take place, in consequence of the unpronounceable double consonant (*thr*) thence resulting, and so at least the lightest vowel was chosen. The same reason caused, no doubt, the retention of the vowel in the gen. and dat. sing., the syncope of which was to be expected according to the analogy of other languages and of the plural cases (although a formation *atharas*, *athars*, *athar*, *athari*, *athir*, would not be impossible), and in the gen. plur. the retention of the ending-vowel in its weakened form *e*;⁵¹ at least, there is no reason to assume for the Old Irish a transition into the *i*-declension, which

ancient, it is not primitive (compare Lat. *lapid*, Greek *ἐλπίδ*, *κορυθ*, Zeitschr. f. v. Sp. iv., 325, 332).

⁵⁰ [xviii. Rather thus: acc. *coín n*, gen. *con*, dat. *coín*; plur. nom. *coín*, acc. *cona*, gen. *con n*, dat. *conaib*.]

⁵¹ [xix. This gen. plur. in *e* only occurs in *athre*, *bráithre*, and is certainly due to a passage over to the *i*-declension. *Máthair* forms its gen. plur. regularly—thus: *máthar n*.]

to be sure would easily explain the form *athre*, but which even the Latin *patrum* spurned. In the dative plural, *a*, and not *i*, is also used as a copulative vowel, as *athraib* shows,⁵² and if *braithrib* occurs beside it, we must either view it as an invasion of the secondary *i*, or an indication of the early introduction into Irish of orthographical confusion. The nom. plur. is not supported by evidence; we cannot put it down otherwise than as *athir*, as Zeuss does. On the other hand, there is no evidence to entitle us to assume with Zeuss an ending *-u* for the masc., as we have nowhere detected, except in the nom. *druith*, a transition into the vocalic declension. We accordingly assume the following genetic development:—

		<i>Primitive period</i>	<i>Pre-historic period.</i>	<i>Historic period.</i>
Sing. Nom	.	athâr	athar	athir
	Acc. . . .	atharin	athirn	athir
	Gen. . . .	athras	athars	athar
	Dat. . . .	athri	athir	athir
Plur. Nom.	.	atharis	athirs	*athir
	Acc. . . .	athrâs	athrâ	*athra
	Gen. . . .	athrân	athran	athre
	Dat. . . .	athrâbis	athraibs	athraib

The addition of a determinative suffix already shows itself in the Old Irish in some *r*-stems (V.); in the Modern Irish its action has been felt over a much wider circuit, and has even penetrated the nouns of relationship.⁵³ Unfortunately, too few forms of this class have been preserved to us to give a complete idea of the declension, nevertheless we see from the existing ones of *cathir* (oppidum):—

Sing. . . .	cathir, cathraig, cathrach, cathir.
Plur. . . .	cathraig.

—at least so much clearly, that these words, to which *nathir* (natrix) likewise belongs, even when assuming this suffix, followed a consonantal declension. Bopp's conjecture, adopted by Kuhn also, in his review (observation 15), that this *ch* (*g*) represents an original *k*, is now completely justified by the Irish phonetic law, according to which the tenuis between vowels changes into the aspirata (fluctuating into media); but to his comparison of the Gothic *bróthrahan*s and the Sanskrit *-aka* may be added

⁵² [xx. In Gaulish *ē* was used as a copulative vowel, as is shown by *mātrēbo* (matribus), cited *suprà*. Note 23, p. 56.]

⁵³ [xxi. This "determinative suffix" is a dream. The Old Irish nouns to which Ebel alludes (though *i*-stems in the nom. sing.), have, like γυνή, passed over to the *c*-declension in the oblique cases. There are, of course, *c*-stems in all cases. Thus *tethra*, gen. *tethrach* (a scald-crow), is the Greek *τέρπαξ*, gen. *τέρπακος*. The gen., dat., and acc. pl. of *cathair* may be set down with certainty as *cathrach ñ*, *cathrachaib*, *cathracha*, respectively; for *huasalathrach* (patriarcharum) occurs in St. Patrick's hymn (*Liber Hymnorum*), and *huasalathrachaib* (patriarchis) in Zeuss, p. 827 (the nom. sing. is *huasalathair*, cf. Ang-Sax. *heah-fidher*), and *coercha* (sheep, acc. pl.) for *cáeracha*, in St. Brogan's hymn, v. 33.]

the still more apt one of the Greek κ in $\gammaυνή\ \gammaυναικός$, like the opposite employment of the c in Latin, *senex*, *senectus*, along with *senis* (compare the essay of Curtius on individualizing suffixes in Zeit. f. v. Sp. Bd. iv.) The dative *cathir*, no doubt, likewise rests upon a similar mutilation, as is frequently found among the u -stems, and should not have been placed by Zeuss in the paradigm; the normal form would be *cathrich* or *cathraich*, in the plur. acc. *cathracha*, gen. *cathrach*, dat. *cathrachaib* may be expected.

In its most ancient stage the Gaedhelic, consequently, harmonizes with the classic languages by the conservation of the consonant declension of the t -, n -, and r -stems; it even exceeds the Latin in the conservation of the purity of the nom. acc. and gen. plur.; on the other hand it associates itself to the Gothic by the passage of the s -stems into the vocalic declension, which takes place as in the Slavonic languages in two ways: by an addition in *áis*, *áisa*, contrasting with the Sanskrit *áyus*; by a loss in *nem* (*nima*) in contrast to the Sanskrit *nabhas*, with a change of gender, as in the Slavonic *tíma*, against the Sanskrit *tamas*.

§. 5. Declension of masc. (and neut.) A - and IA -stems.

According to what has been said above, the vocalic declension includes masculine and neutral a -, i -, and u -stems, feminine $\acute{a}$ - and $\acute{i}$ - ($\acute{i}$ -) stems; feminine u -stems are wanting, as in the Lithuanian.

We have already carried back the inflexions of the masculine a -stems to the oldest attainable Celtic forms. Most of them scarcely require an observation. The nom. sing. *-as*, *-a*, *-an*, instead of *-am*, gen. plur. *-án* instead of *-ám*, agree exactly with the Sanskrit; the dative plural *-abis* presupposes a more ancient phonetic condition than we find preserved either in the Sanskrit instrumental *-áis* or in the dative *-ébhyas*, and which is easiest explained from the instrumental (primitive form *-abhis*), for the dative form *-abhyas* would have led (through *-abias* *-abeas*, or through *-abís* *-abí*, through *-abés* *-abé*) to *-abe* or *-aibi*.⁵¹ (The *-ai* in *-aib* is not a diphthong, but umlaut, as the secondary form *-ib* shows; it is, consequently, not comparable with the Sanskrit *-é* in *-ébhyas*). The dat. sing. *-ui* (or *ú*? undoubtedly formed out of *-ui*) and the acc. plur. *-us* agree with the Lithuanian and Slavonian, being in the former *-ui* and *-us*, and in the latter *-u* and *-y*; the gen. sing. and nom. plur. *-í* agree with the Latin (besides the dat., Latin *-ó* from *-oi* = Oscan *-ui*). In the nominative plural the pronominal ending (Sanskrit *-é* = primitive *-ai*, Lithuanian *-ai*, Gothic *-ai*, Greek *oi*, Latin *í*, older form *-ei*, Slavonian *-i*), has,

⁵¹ [xxii. See note 23, p. 56.]

consequently, penetrated into the substantive declension in the Celtic also, as it does every where except in the Sanskrit, Gothic, Umbrian, and Oscan, and *indfir* (pronounced *indir*) from *innî firî* corresponds exactly with *illi viri*; this *î* has, consequently, been formed out of *-ai* or *-ei*. On the other hand, in the genitive singular, the most difficult form, the *-î* corresponds to the Latin *-î*, which, as is well known, is written not *-ei*, but *-i* in Lucilius, and in the Sen. Cons. de Bacc., an important circumstance for the correct explanation of the Latin form; as for the rest, the explanation is easier in the Irish than in the Latin. Of the primitive ending = Sanskrit *asya*, not only *y*, which has everywhere fallen away, but also a vowel-flanked *s* must have disappeared in the Irish (Zeuss, 60, 63); thus arose *-ii* (as in *ith* = Kymric, *iot*, *ice* = Kymric *iace*) which of course coalesced immediately into *î*; it only remains doubtful whether this *-î* also belongs to the Kymric or exclusively to the Gaedhelic.⁵² The agreement of both forms with the Latin is, no doubt, the chief reason why the words borrowed from the Latin have mostly preserved, in so strikingly faithful a manner, the declension-type, and that transitions into this declension have only taken place from the third Latin one;—a change which the gen. *-is* induced, as, for example: *socrâit*, in consequence of *socratis* (even in the nom. *preceptóir*, plur. *preceptori*, in consequence of *preceptoris*), not the reverse, except where it was necessary to join a word to a known ending, as in *peccad* masc., gen. *pectha pectho* from *peccatum*, in consequence of the many words in *-ad* having similar meaning. The words in *-e*, sometimes written *-a*, and *ya-* (*ia-* and *aia-*) stems form a subdivision of the *a*-stems; in them either *-i* before *-a* was changed into *-e*, or *-ia* was contracted into *-ê*, *-ii* into *-î*,—these long vowels being naturally shortened in the auslaut; all forms admit of being explained in both these ways in the most perfectly satisfactory manner. The *-u* in the dat. sing. remained here in the combination *-iu* in the auslaut, for which, however, *-u* and *-i* also occur; in the dat. plur. a slight shortening took place, as *iib* did not give *-ib*, but *-ib*.⁵³

The neuters exhibit a curious anomaly, inasmuch as the primitive *-â* of the nom. and acc. plur., shortened to *-a* in the second period, should have dropped off in the third; if we connect with *-a* of this case an analogous singular phenomenon, namely, that the *inna*, *na*, of the article, as in the feminine, does not affect the suc-

⁵² [xxiii. In the Old Irish, as in the Latin, the gen. sing. of masc. and neut. *a*-stems was originally the locative sing., and has nothing whatever to do with *asya*. Ebel is now inclined to admit this. See, *infra*, On the Position of the Celtic, §. 11, p. 125.

⁵³ Zeuss erroneously remarks, page 248: quae *-ib* dativi non inficiens ex *-ab* defecisse videtur. The observation would have been in place at p. 253.

ceeding consonants, we shall be able to assume, with great probability, that in the Gaedhelic the disappearance of the neuter, which in the Kymric can be no longer detected, had even then already been prepared in the plural, by the invasion of the feminine form, for the *inna* of the article does not admit of being explained otherwise than from *innás*. The Irish *na cenéla* (nationes) consequently admits of being compared with the Italian *le arme* instead of *illa arma*. Even the accusative plural masculine *inna*, *na*, appears to rest upon an inorganic invasion of the feminine form, because the substantive forms lead us to expect rather **innu*, **nu* [conversely *-iu*, (*-u*) = Lat. *eos*, occurs suffixed to the prepositions, even as feminine]; this form has also penetrated in the Modern Irish, from the accusative even into the nominative, so that a difference of genders is nowhere to be found in the plural. The *-ia* stems form the plur. nom. regularly in *-e*, as in the singular.

The adjectives mostly follow the rule of the substantives, only that the *ia*-stems readily shorten the acc. plur. mas. into *-í*, and the nom. plur. neuter often shows *-i* instead of the more normal *-e*. The *-i*, which the *a*-stems often exhibit in the neuter plural, is more remarkable, and is hitherto inexplicable to me.⁵⁴ A stem *sáinia*, instead of *sánia*, may probably be assumed for *sáin* (diversus), in consequence of the *ai*. This has maintained itself in the form of the nom. plur.; in the others it has shortened itself like *aile* into *aill*. But how are we to explain *isli*, *dilsí*, *comaicsí*? Of the pronominal *a*-stems, a form has, however, been preserved, in spite of the frightful ravages here occasioned by the phonetic laws, which sets aside the only reason which could probably be still put forward (except the accidental similarity with the stem-auslaut *a* in the Sanskrit) in favour of explaining the gen. *-a* of the following class by the Sanskrit *-asya*. Of the stem *a*, there have been preserved: gen. sing. masc. and neut. *á*, with affection of the succeeding consonants, consequently primitively a vowel-ending stem; gen. fem. *á* without affection, consequently for *ás*; gen. pl. *an*, *a*, consequently produced from *án* instead of *ám*. Bopp therefore believed himself able to explain the masc. *á* by *asya*, and the fem. *á* (instead of *ás*) by *asyás*. But now *ái* appears as the most ancient form of the gen. sing. masc. and neut. (in Zeuss, 334, 345), besides *ae*, *e* (evidently *é*) also (Zeuss 347); consequently *asya* modified itself in the first instance into *ái*, and from thence issued the Gaedhelic forms *á* and *é* like the

⁵⁴ [xxiv. Adjectival *a*-stems never exhibit *i* in the nom. pl. But (as was to be expected) this is done by adjectival *i*-stems, such as *sáin*, *ísil*, *dílis*, *comacuis*, whence *sáini*, *ísli*, *dílsi*, *comaicsí*. The adjectival *i*-declension exists at the present day. See the paradigm (*geanamhail*), O'Donovan's Grammar, p. 112.]

Kymric *y*, *e*. Thus even this form, which in consequence of its shortness must have sounded fuller, differs very little from the usual genitive of the *a*-stems. The neuter of the article *an*, which has weakened itself even to *a*, rests no doubt on a primitive form *anat*,⁵⁵ which from the outset must have become *ana*, *an*, because *anan* (instead of *anam*) must have always retained an *n*; the fundamental *-at* also explains the more violent shortening in the neut. *aill*, as compared with the masc. and fem. *aile*.⁵⁶

§. 6. *Declension of masc. i- and u-stems.*

The explanation of the case-endings is much more difficult in the following classes, where the separation of the masculine *u*- and *i*-, and the feminine *â*- and *i*-, stems, is already difficult.

The *i*- and *u*-stems sound in the nom. and acc. sing. perfectly alike, for *-is*, *-in*, *-i* must drop off like *-us*, *-un*, *-u*; even the vowel of the stem does not always give us information, although *dénmid* (factor), for example, proves itself by the genitive *dénmada* to have been altered from *dénmad*, *muir* (mare) announces itself by its *ui* as an *i*-stem; we must, therefore, endeavour to ascertain the stem from other sources, as, for instance, in *bith* (mundus), from the Gaulish *bitu*; in *fil* (arbor), from the Gaulish *vidu* and the Saxon *widu*; in the verbals in *-ad*, from the analogy of the Latin in *-tus*, etc. The only case which shows the stem clearly, the accusative plural,⁵⁷ the *-ûs* and *-îs* of which have changed into *-u* and *-i*, is unfortunately only very weakly represented, so that, in many cases, no certainty can be attained. In the dative singular *-ui* and *-î* are certainly to be assumed; these should become *-u* and *-i*, and leave behind unilaut, but most words take no umlaut (no doubt, in consequence of the primitive length of the stem-vowel). Among the whole of the examples in Zeuss, *biuth* alone shows umlaut, which he accordingly has placed in the paradigm. It would appear as if the endings *-a*, *-o*, *-e* established a difference in the genitive singular; but this is by no means the case, as *aithrethado*, from the nom. *aithribthid* (possessor), for example, shows a decided *i*-stem; we must look upon *-o* rather as an obscuring of the *-a*, *e*, exactly as *-ea* and *-eo* are the result of the subsequent action of a preceding sound, or of one which had preceded. The explanation apparently

⁵⁵ [xxv. More probably the neut. article *an* (*a* before a noun beginning with a tenuis) stands for *sa-n*—the *n* being the neut. ending, and the *sa* the well-known pronominal stem. The *s* appears in composition with non-aspirating prepositions.]

⁵⁶ [For confirmation of this hypothesis see, *infra*, "On the so-called prosthetic *n*", §. 12, p. 90.]

⁵⁷ [xxvi. The nom. and acc. plur. (*-i*) and dat. plur. (*-ib*) of *i*-stems show the stem clearly enough. But Ebel here, as elsewhere, suffers from the incompleteness of Zeuss's collection of examples.]

nearest at hand, that *-o* is derived from *-aus* (= Sanskrit *-ós*), is, consequently, to be rejected, and we are to assume either that *-aus*, as well as *-ais*, has become *-a*, or, to start from the fundamental form, *-avas* and *-ajas*, which must likewise become *-ás*, *-a*; as the dative cannot be explained from *-avi*, *-aji*, the first hypothesis is, probably, to be preferred.⁵⁸ According to the analogy of the consonantal declension (compare also Gothic *-yus* and *-eis*), a fundamental form *-avis* and *-ajis* is to be laid down for the nom. plur.; *-ais* must arise from *-avis*, and this, on the dropping of the *s*, could be contracted to *-á*, *-é*, or *-í*; *-ajis*, in consequence of the preponderance of the *i*-sound, passed, as it appears, exclusively into *-í*, certainly at least in the masculine in *-ati* (nom. *-id*, gen. *-ada*); the auslauts were, as everywhere, subsequently shortened, so that, along with *-ai*, *-ae*, *-a*, *-e*, and *-i*, also occur, e.g.: *gnímai*, *gnímae*, *gníma*, *gníme*, *gními*, from the stem *gnímu* (action). The form *mogi*, from the stem *mugu*, along with *mogae*, is interesting, as their common origin from *mogai* is betrayed by their *o*. The ending *-e* of the gen. plur. is remarkable; it appears to announce itself in *moge* as a degeneration of *moga*; on the other hand, it has produced umlaut in *forcitlaide* (præceptorum); either there existed formerly a difference here, as in the nominative plural, so that *-avan* contracted itself into *-án*, *-ajan* into *-ian*, *-én*, or, the umlaut in *forcitlaide* is inorganic, and *-e* is in both cases degeneration of *-a*, from *-án* = *-aván* and *aján*, which forms we take as a starting point according to the analogy of the Gothic *-ivé* and *-é* instead of *-iyé*. The dative plural shows a remarkable anomaly, the normal *-ib* of the *i*-stem indeed appears in it, but not the *-ub* or *-uib* to be expected in the *u*-stem, but, instead of it, *-aib* (compare *aitrethidib*, *mogaib*); either interchange has here taken place between *ui* and *ai*, a circumstance otherwise without example (*ui* for *ai* is frequent), or the generality of the ending *-aib* introduced it inorganically here also, in the same manner as in the Greek *πόλεσι*, *πήχεσι* the *ε* appears to have penetrated by means of the false analogy of the other cases. The neuter plur. in the nom. and acc. *rind* (constellations) *mínd* (insignia), *fess* (scita), appears, at first sight, to be altogether anomalous without an ending, which is the more striking as even the *a*-stems show an ending where one ought not to expect it; if,

⁵⁸ [xxvii. Surely it is easier to assume that the *i*-stems (with one or two exceptions, such as *tír*, *tíre*) passed over in the gen. sing. to the *u*-declension. Hence the *-o* (*-a*) = *-ós*, *-aus*. The fem. *á*-stems likewise, in the gen. sing.—with five exceptions (*inna*, *éna*, *mnúa*, *cacha*, *nacha*)—have passed over to the *i*-declension, and consequently exhibit the ending *e* = *és*, of which the *e* was probably produced, by a very ancient contraction, from *a-i* (cf. Goth. *anstais*). Here, of course, as also in the Sanskrit and Lithuanian *ávés*, *awés*, “ewe’s”, the stem-vowel has been gunated.]

however, we start from a fundamental form *-vâ, -ja*, in which the *v* and *j* were dropped, a development *-â, -a*, may also be conceived (perhaps we should even take *â=ava, aja* for a starting point, with inorganic gunation, in which case *rind* would bear the same relation to *gnima*, as *ταχέα* does to *ταχέες*). In spite of much obscurity in details, it is at least clear from the preceding, that the *i*- and *u*-stems by no means so fully coincided from their origin, as would appear from the representation of Zeuss. For the sake of greater clearness, we shall here also attempt to give an idea of the declension arranged according to the different periods, without the secondary forms however:—

U-STEMS.

		Primitive period.	Pre-historic period.	Historic period.
Masc. Sing.	Nom.	bithus	biths	bith
	Acc.	bithun	bithu	bith
	Gen.	(bithavas) bithâs?	bethâ	betha
	Dat.	bithui	bithu	biuth
	Plur. Nom.	(bithavis) bithais	bethai	betha
	Acc.	(bithuns) bithûs	bithû	bithu
	Gen.	(bithavân) bithavan	bethân	* betha
	Dat.	bithubis	bithuibs	* bithuib
Neut. Sing.		fidu	fid	fid
Plur.		(fidvâ) fidâ	feda	fed

I-STEMS.

Masc. Sing.	Nom.	dénmadis	dénmids	dénmid
	Acc.	dénmadin	dénmidn	denmid
	Gen.	(dénmadajas) dénmadâs?	dénmadâ	dénmada
	Dat.	dénmadâ	dénmadi	déumid
	Plur. Nom.	(dénmadajis) dénmadis?	dénmidi?	denm
	Acc.	(denmadins) dénmadis	denmidî	dénmidi
	Gen.	(denmadajân) dénmadajan	dénmadân	* denmada
	Dat.	dénmadibis	dénmidibs	dénmidib
Neut. Sing.		fissi	fiss	fiss
Pl.		(fissjâ) fissâ	fessa	fess

According to this view, it is only the dative plural of the *u*-stem *mogaib* that appears to be distinctly inorganic; the gen. plur. *moge* shows a weakening of the *a* into *e*, which we shall presently find again in the feminine.

§. 7. Declension of fem. *A*- and *i*-stems.

The feminine *â* and *i*-stems have suffered still greater confusion in their declension, so that the primitive stem can now only be recognized from the vocalization of the nom. sing. and by comparison with other languages.⁵⁹ Thus the following show them-

⁵⁹ [xxviii. It is true that in the Old Irish the fem. *â*-stems have in the gen. (but see note 58), dat. and acc. sing. gone over to the *i*-declension; and in the dat. this was the case in Gaulish, as we learn from *Belesami* (nom. *Belesama*) in the inscription of Vaison. But in the Old Irish the fem. *i*-stems are (with very few exceptions*) still clearly distinguishable from the fem. *â*-stems.

* *Gabâil* and its compounds are declined in the plur. like *â*-stems, so *idbairt*, *epert*.

selves by *e* and *o* to be *â*-stems: *ess*, *iress* (fides), *nem* (cælum), *tol*⁶⁰ (voluntas), *breth* (judicium), *croch* (crux), *ingen* (filia), *aimser* (tempus), and the words in *-em*, such as *moidem* (laus), *eritem* (fides); by *ia* instead of *é*—*grian* (sol), *briathar* (verbum), *bliadan* (annus); by comparison — *rún* (mysterium) = Gothic *runa*, *ferc* (*ira*) = ὄργή, the words in *-acht* and *-echt*, which presuppose a Sanskrit *-akatá* and *-ikatá*, and which are not consequently derived directly from the stem-substantive, but through a hypothetical adjective in *-ach* or *-ech* (= Sanskrit *-aka*, *-ika*), as for example, *déacht* (divinitas), which is not obtained directly from *dia*, but through **déach* (divinus). We must consider as *i*-stems especially the verbal-nouns in *-t*, such as *epert* (locutio), *tabart*, *tabairt* (datio), and also *iargigid* (inquisitio, quæstio); the secondary forms, as *muing*, f. = *mung*, m. (a mane), quoted by Pictet, (*Op. cit.* p. 123), appear to be *i*-stems (whose nominative *-î*, *-i*, *₂*, cannot be distinguished in its actual state from *-is*, *₂s*, *₂*). No certain distinctions can be at all recognized in the case-endings, and nothing can be based upon the secondary forms. The genitive singular shows, for instance, along with the dominant *-e*, also *-a* and *-o*; but if we would assign the *-a* to the *â*-stems, and the *-e* to the *i*-stems, we find our proposition contradicted by the circumstance that *-e* is the commonest ending, and appears just in those words the vowels of which point to *-â*, as in *nime*, *irissee*, *ingine*, and that *-a* occurs frequently in characteristic *i*-stems, as in *eperta*; if, on the other hand, we would assign *-a* to the *i*-stems, from the analogy of the masculine, and *-e* to the *â*-stems from the analogy of the Latin *-æ*, the feminine of the adjectives like *cacha*, *nacha*, (and even *óna*, along with *aine*), will remain unconsidered; consequently *-a* is clearly the oldest form in both classes, it weakened itself into *-o* and *-e*, even in the same words; e. g., *dúile* and *dúlo*, from *dúl* (mundus, res, creatura), and the umlaut before *e*, in spite of its universality, is inorganic; the fundamental forms *-ás* and *-ajas* had also to follow the same course: *-ás*, *-â*, *-a*, or if we prefer starting from *-ais* in-

In addition to the circumstance that the *â*-stems in general have their gen. sing. in *-e*, whereas the *i*-stems make it in *-o* (*a*), the nom. and acc. pl. of fem. *i*-stems end in *-i*, but those of the *â*-stems in *-a*. Next, the gen. pl. of fem. *i*-stems ends in *ae*, *-e*; that of fem. *â*-stems has no ending. Thus *nime*, *dúle*, *caille*, *rígne*, *infínite*, *bliadné*, *fochraice*, *fochide*, are the Old Irish genitives plur. respectively of *nem*, *nim* (heaven), *dúil* (a thing), *caill* (a wood), *rígain* (a queen), *infínit* (an infinitive), *bliadain* (a year), (not *bliadan* as Ebel wrongly gives it); *fochricc* (a reward), *fochaid* (tribulation). Thirdly, the dat. pl. of fem. *i*-stems ends in *-ib*, that of *â*-stems in *-aib* (*áirmib*, Zeuss, p. 670, probably comes from **áirim*: cf. Welsh *rhif*.)]

⁶⁰ In the Lord's Prayer, as given by O'Donovan, there is, however, *bid do toil* (thy will be done), which indicates an *i*-stem.*

* [xxix. *Toil* here is the accusative sing., according to the regular Old Irish syntax (Zeuss, p. 894): the nom. sing. is *tol*, which was anciently a fem. *â*-stem.]

stead of *-ajas*, we have *-ais*, *-ai*, *-a*. The *i*-stems could form the dat. sing. in *-î*, *-i* (or *-aji*, *î*, *-i*, which is less probable), the *a*-stems either in (*-âi*), *-é*, *e*, or (*-ai*), *-î*, *i*, as in the nominative plural of the masculine; both of them consequently agree, as may be expected, in the umlaut. An *-îs*, *-î*, *-i* might have been expected in the nominative plural, as in the masculine, from the fundamental form *-ajis*; but an *ais*, *-ai*, *-a*, was equally possible; and if the examples give *-a*, *-e*, and *-i*, an *-ai*, *-î*, *-i* is not impossible, even in the case of *a*-stems (compare Greek *-ai*, Latin *-ae*): consequently a separation of both classes, according to the ending, is neither *a priori* necessary, nor in the actual state possible (see the examples in Zeuss, 262, 263); although, no doubt, the assumption of a primitive difference between *-a* (from *-âs*) and *-i* (from *-ajis*) would have much in its favour. What is most striking is, that no ending whatever is found, not only in *persin* from *persan* (*persona*), which is treated in Modern Irish altogether as an *n*-stem (nom. *pearsa*), but also in *aimsir*; and only in the vowel is there an indication of *-i*. Zeuss considers the *e* and *i* as secondary forms, which have resulted from assimilation: *litre*, *epistli*, appear to speak in favour of this view, but not *bliadni*; for an *a* has been here dropped. The following hypothesis appears to me to offer most advantages: the feminines in *-i* formed like the masculines, the nominative plural in *-i* (see above), those in *-â*, contracted *-âi* (as in the Greek and Latin), into *é* or *î*, which, in consequence of its genesis from *-âi*, yielded somewhat more resistance to retrenchment than the *-i* of the masculine resulting from *-ai*, and which therefore maintained itself, in part, in the weakening *-e*, *-i*, and in part actually dropped off; but the form *-a* rests (as in Slav. *-y*, *-e*), on an interchange with the accusative, which already in some instances took place in the old language, but which has deformed the whole declension in the modern. This hypothesis is supported by the nominative plural of the *iâ*-stems, which never contain *-e*, but everywhere *-î*; a circumstance which points to an earlier *-î* generated from *-ie* or *-ii*. The class-distinctions are completely obliterated in the gen. plur. (without ending), dat. (*-aib* and *-îb* without distinction), and acc. plur.,⁶¹ which often terminates in *-a* even in undoubted *i*-stems, *e. g.*, *idbarta* (oblationes), seldom in *-i*, as *dúli* (res), *epistli* (epistolae).

If almost everywhere here, an invasion occurred of the most numerous *â*-stems, the reverse appears to have taken place in the accusative sing., which exhibits, almost without exception, umlaut or a primitive *i*; only *delb* (imaginem) and *nem* (cælum) point to an ending *-an* (*ân*). Even if we were to assume that *-an*

⁶¹ [See Note 59, p. 76.]

was changed, as in the Zend, into *-en* (in the consonantal declension we were led to an accusative *-in* or *-en*), the cause why this degeneration did befall the primitive *-án* of the feminine rather than the *-an* of the masculine, would still remain unexplained. The *ái*-stems partake of the above mentioned deformities in the accusative singular, which terminates in *-i* instead of *-e*, and in the accusative plural, which likewise ends in *-i*, on the other hand the gen. sing. *-e* leads us back to the primitive *-a* of this case; the nominative plural *-i* appears to be formed according to rule, except that all the end syllables are shortened. Accordingly, instead of the forms to be expected,—which are somewhat as follows:

Sing. Nom.	-á	-a	—	-is	᳚s	᳚
Acc.	-án	-an	—	-in	᳚n	᳚
Gen.	-ás	-á	-a	-ás	-á	-a
Dat.	-i	-i	᳚	-i	-i	᳚
Plur. Nom.	-i	-i	᳚ (?)	-is	-i	-i
Acc.	-ás	-á	-a	-is	-i	-i
Gen.	-án	-an	—	-aján	-án	-a
Dat.	-ábis	-aibs	-aib	-ibis	-ibs	-ib

—we find the following actually occurring:

Singular	.	.	—, ᳚	Plural	.	.	-a (-i, ᳚)
			᳚ (—)				-a (-i)
			᳚ e (-a, o)				—
			᳚				-aib (-ib)

in which ᳚ represents the after-action of the retrenched *i*. The same degeneration of the original forms occurs, as may be expected, in the Modern Irish, where *an cholam* (columba) fluctuates in the gen. sing. and nom. plur. between *na colaime* and *colama*, and even in the dat. sing. between *do'n cholam* and *cholaime*; it is still further increased by the circumstance that the genitive has also frequently thrown off the inflexion vowel, *e. g.* *na hoigh* from *an oigh* (virgo). In general, however, the *á*-stems appear to have assumed the ending *-e*; the *i*-stems on the other hand *-a*, *e. g.*: *slat* (rod), gen. sing. and nom. plur. *slaithe*; *sgíath* (wings), gen. *sgeithe*; *neamh* (heaven), gen. *neimhe*; but *feoil* (flesh), has however, gen. sing. and nom. plur. *feola*; and *oigh*, although in the gen. sing., it has *hoigh*, in the plural it is *na hogha*. The fluctuation has even passed over to the masculine, for *iasg* (fish) forms gen. *éisc*, plur. *éisc* or *iasca*; and *sruith* (scholar), in both cases *sruith* or *srotha*. Already in the Old Irish, the vocative has been replaced throughout in the plural by the accusative; in the singular there are only some forms of the *a*- and *á*-stems preserved, *e. g.* *fír* from *fire*, as in other languages; *duini* from *duinie*; and among consonantal stems the single one *ath(a)ir* in the Lord's prayer. We have already found in the Old Irish beginnings of a permutation of the

accusative and nominative. The consonantal *n*- and *t*-stems suffer likewise a peculiar mutilation in the Old Irish. The secondary forms of *anim* (anima); gen. *anme*, dat. and acc. *anim*, admit of being explained from a vocalic base: not so the anomaly, which not unfrequently occurs, that the nominative directly supplants the dative and accusative. Examples: *do foditiu* (ad tolerationem), *do aurlatu* (ad obedientiam), acc. *aurlatu* (obedientia); compare also Pictet's observations (Beiträge zur vergleichenden Sprachforschung, I. 82 sq.), where the reverse is likewise proved. The circumstance that, in the Modern Irish, there is mostly (except in the anlaut) no difference to be found between the nominative and dative singular, agrees with the foregoing; it consequently appears that the accusative first was identified with the nominative, and then the dative. The language is, therefore, in a fair way to lose all its inflexions like the Kymric dialects, and first of all the genitive plural, which now is already mostly like the nom. sing.;—properly speaking, only the gen. sing. and plur. and dat. plur. are yet retained: nay, even the latter has been already deprived of its ending in the article, in the same way as the adjectives have lost all their inflexions. The decision as to the origin of the modern forms of the consonantal stems is rendered more difficult by this phenomenon. Only few still correspond to the old form, thus *breitheamh* (judex), gen. *breitheamhan*, nom. plur. *breitheamhuin*, with BRITHEM, gen. BRITHEMAN, nom. plur. BRITHEMAIN. *Daileamh* (butler), for example, deviates already in the gen. *daileamhuin*, from *dálem* (caupo), gen. *dáleman*. The majority have affixed *-e* or *-a* either in the nom. plur. or in both cases, and it is difficult to decide whether we are to look upon this as a simple transition into the vocalic declension (as in New High German *brunnen*, instead of *brunn*), or whether the nom. in *-a* is not really an accusative; perhaps the accusative form first passed into the nominative, and then the genitive singular followed the analogy of the nominative plural now appearing vocalic. A striking example of this mixture of forms is afforded by *cu* (canis); gen. *con* (perfectly normal), or *cuin* (*a*-stem); dat. *coín* (normal); nom. plur. *cona* (accusative form), or *con* (spurious formation), or *coín* (normal); gen. *cu* (mutilated), or *con* (normal); dat. *conaibh*. The nominative plural *athara* from *athair* (father), has assumed the accusative form, and thereby got the external appearance of a vocalic stem, an example in which it was followed by the gen. sing. *athara* (in use besides the primitive *athar*); side by side with them forms with *-ach* have been introduced; e. g.: *aithreach* (as in Old Irish CATHIR).⁶² The applica-

⁶² [xxx. *Aithreach* is simply due to a passage over to the *c*-declension. So

tion of the suffix *-adh* (compare *dénnid*, *dénmada*, or *tenga*, *ten-gad*), as an inflexion-copulative, is new; *e. g.*, in the plural *bogadha* (for *bogha*, bows), considered also by Pictet (*Op. cit.* 128) to be a new formation; but, perhaps, it may help us to an explanation of the Kymric plural forms.

§. 8. *The distinction of the plural in Kymric.*

The Kymric, on which we must in conclusion cast a glance, has preserved nothing more of its whole inflexions, even in the oldest documents, than the distinction of the plural, but this it employs very arbitrarily: compare *trimeib* (tres filii) with *meibion*, *meibon*, and *tyreu* (turres) with *tyroed*. Obviously, as in the New High German, this is of three kinds: either the old plural form remains, consequently true inflexions, as *brüder*, *gäste*, *fische*, from the Gothic *bróthrijus*, *gasteis*, *fiskós*; or the ending of the stem, dropped in the singular, behind which the grammatical ending has disappeared, as in *mannen*, where the *-an* of the Gothic *manna* (stem *mannan*), which has vanished in the singular, has been preserved, while the proper ending, the *s* of *mannans*, has been dropped; or a suffix (determinative), wholly foreign to the stem, like the German *-er* in *eier*, to which true inflexion-endings were, at an earlier period (Anglo-Saxon *ægry*), attached, but which, after their loss (as in the Old High German nom. *eigir*), exactly occupies the place of the ending, like German *länder* instead of *lande*, except in the dative plural.

To the first kind belong: 1, the Kymric plurals without endings, and with umlaut, such as Welsh *llygeit*=Cornish *legeit* (oculi); Welsh *seint*=Armoric *sent* (sancti); Welsh *chwaer* (sorores), from *chwior*; *traet*=Cornish *treys*, Armoric *treid* (pedes), from *troet*, Cornish *troys*, Armoric *troad*,—or without umlaut, as *tridyn* (tres homines), *teir morwyn* (tres puellæ). All these forms have lost an *-i*, probably a primitive *-î* or *-is* (*-îs?*), and consequently may be compared to the Gaedhelic forms such as *maice* (filii), to which the Welsh *meib*, or *traigid*, the Kymric *traet*, *treys*, *treid* correspond; for instance, the masculine verbals in *-iat*, *-iad*, pl. *-ieid*, such as *guiliat*, are parallel to the Gaedhelic in *-i*, pl. *-id* (*filid*) (see above). 2. The plurals in *i*, such as *meini* (lapides), from *maen*, Corn. *esely* (membra)=Armoric *ysily*, from *esel*, appear to correspond to the Gaedhelic *-i* (in *ia*- and feminine stems); but interchanges occur, however, such as Cornish *meyn*, Armoric *mein*, alongside of Welsh *meini*, and this even in the same dialect, *e. g.*: Cornish *tell*, and also *tylly* (foramina), from *tol*, which do not allow a strict

in Early Middle Irish we have *mainistir* (from *monasterium*), making its gen. sing. *manestrech*. Zeuss, xxviii. so *altóir*, from *altare*, gen. *altórach*.]

separation to be effected. As further instances may also be adduced *Uestri*, Cornish, and Armoric, *listri*, which represent Gaedhelic **lestir*, while on the other hand *dyn* is the Gaedhelic *dóini*. 3. Finally, the plurals in *-au* and *-iau* with their different formations (Zeuss, 290, 122), also belong originally to this category; e. g. *tyreu* (turres), Cornish *dethyow* = Armoric *diziou* (dies); *-au* appears to have belonged originally to the *u*-stems, the verbals in *-at* (*-iat*), *-ad*, pl. *-adau* also correspond to the Gaedhelic abstracts (infinitive) in *-ad*, *-ud*, which take *-a* in plural, so that *-au* may be very well explained from the Sanskrit *-avas*. Pictet's (*Op. cit.*, p. 135) comparison with the Sanskrit *-as*, which changes into *-ó* before sonants, although adopted by Bopp and Kuhn also, is certainly erroneous. But afterwards confusion came in here likewise, so that we see *-au* exactly like the Slavonian *-ov* and the Greek *-εϋ* and other determinatives applied to other stems also, and hence even arose *-iau*. Besides, all three suffixes occur in both genders, so that perhaps the *-i* of the feminine may confirm the above assumed Gaedhelic fundamental form of the nominative plural.

The second kind embraces especially *n*-stems, such as the apparently anomalous *ki* (canis), the plural of which is in Welsh, *cun*, *cwn*, Cornish *ken*, and which corresponds exactly with the Gaedhelic *cú*, plur. *cuin* (the Gaedhelic *ú* is the Kymric *i*); and *ych* = ox, plur. *ychain* (ancient, *ychen*) = oxen;—further, Welsh *brawt*, which has lost its final *r*, plur. *brodyr*, (Cornish *braud* and *broder*, while in the Armoric sing. *breur*, *breer*, the *d* has yielded, plur. *breuder*).

Kuhn (p. 595) wished also to include under the third category the *-an* of gen. *cluasan* (the cars), but in this word it belongs undoubtedly to the third, as *cluas* is evidently the old stem, which, in the beginning, was treated in the declension like *áis*.

To the third kind belong the following: 1. Many plurals in *-au*, *-iau*, in which the ending is foreign to the word-stem proper, such as *penneu* (capita), stem *pinna* (or *pinda*) = Gaedhelic *cinna*, from which nom. *cenn*, dat. *ciunn*, or *breicheu* (brachia), stem *breich*, instead of *brechi*; 2, most words in *-ion* (or *-on*), e. g.—*deneon*, *dynyon* (homines), from the stem *dini* (instead of *dinia*, as the Gaedhelic *dúine* shows), or *meibion* (filii), along with which appear likewise after numerals the forms *meib*, *dyn*, and all Welsh plural adjectives, e. g. *meirwon*, along with *meirw*, from *marw* (mortuus) = Gaedhelic *marb*, plural *mairb* (*moirb*). The *-n* consequently takes exactly the same place here as in the German adjectives and many feminines. 3. The endings *-et*, *-ot*, *-ieit*, *-eit*, and *-ed*, *yd*, *oed*, which otherwise occur as derivatives, and in this respect have been already compared above with the Gaedhelic *-ad*, *-id*, likewise

join many stems as determinatives, in which respect they are parallel with the *-ad*, in Irish *bogadha*, already compared, if I am not mistaken, by Kuhn. (Both forms are related to one another, as $\chi\alpha\rho\iota\tau$ is to $\epsilon\lambda\pi\iota\delta$ in the Greek.) Compare the following words in *-t*: *merchet* (filia), from *merch* (is this identical with Lithuanian, *merga*? cf. p.), Cornish *denys* (homines), Armoric *bretonet* (Britanni) with those in *-ed*: Welsh, *bydoed* (mundi) from *byt*=Irish *bith*, Cornish *eleth*=Armoric *aelez* (angeli). On the other hand, the favourite suffix of the Gaedhelic *-adh* is not employed as a determinative in Kymric.

In the representation of my results, I have altogether followed the same analytical way which I had gone in the investigation itself, in order to render the verification easier to the reader. Some points will require completion and correction. On the whole, I hope that the results obtained will be found correct.

§. 9. Note on *a*-, *i*-, *u*-, *u*-, and *nt*- Stems.

According to a communication of Mr. Stokes, that has reached me through Professor Kuhn,⁶³ the *a*-stems show in the Old Ogam inscriptions not only the gen. in *i*—MAQVI⁶⁴ (a form which explains by its *qv* not only the Kymric *map*, but also the Gaedhelic *mace* without aspiration),—but also the nominative in *-as* (CORPIMAQVAS—Cormac). This highly interesting form may accordingly be placed by the side of $\mu\acute{\alpha}\rho\kappa\alpha\nu$, Pausanias, x. 19, 11, in which we are now justified in recognizing the true Gaulish accusative of *marcas** (=gen. *mare*, w. 3, *march*, plur. *meirch*). The Ogam secondary forms in *-os*, show us at what a remote period the obscuration of the *a* to *o* was already common. I would not, with Stokes,⁶⁵ deduce the length of the dat. plur. from the single form *scélláib*, as even feminine *a*-stems fluctuate between *-ab*, *-ib*, *uib*, which indicates a short vowel; and the *iá*-stems invariably show *-ib*, instead of the *-íb* to be expected.

That the neutral *aill* rests on a vocalic fundamental form, the *t* or *d* being dropped (like Greek $\acute{\alpha}\lambda\lambda\omicron$), as was already suspected (p. 90), is confirmed by the mortification of the *s* in *alaill sain*, Z. 364.

According to an observation kindly communicated to me, Mr. Stokes now recognizes in Zeuss' Ordo Posterior Ser. 4., three kinds of stems, in *-d*, *-t*, and *-nt*. The latter, to which *dínu*, *fiadu*, *cara*, *náma* (*námae*), belong, correspond accurately with the participles in *-ant*,⁶⁶ as, for instance, *cara* (from *cairim*, amo), *fiadu* (= *védant*,—Stokes); *dínu* appears to be connected with the

⁶³ [Published in the *Beiträge z. v. Sp.* i. 448.]

⁶⁴ [Given in Mr. Stokes' paper, "Bemerkungen über die irischen declinationen"—*Beitr. z. v. Sp.* i. 333.]

⁶⁵ [Idem, 336.]

⁶⁶ Also, Stokes' view, *Beitr.* i. 457.

Sanskrit root *dhê* ("suckling"); *cara* and *nâma* likewise occur in the nom. in Zeuss, who has mistaken the true relation, and led me astray: *incara fá aescare* (sive amicus, sive inimicus), 674, 831, and *bannamae* (inimica), together with the acc. *bannamit* (hostem), 820, the acc. *carit*, 1055, 1062, *escarit*, 1056. These stems appear to be of the common gender like the Latin participles. On the other hand, the *-it* in *nebcongabthetit* stands no doubt erroneously for *-ith* (as generally in all abstracts). That *traig* is a neuter appears to be confirmed by *traig cethargarait*, 1018 (Gl. proceleusmaticum, consequently an acc.); it looks like a participle (= τρέχων), but inflects the dat. plur. *traigthib*, acc. plur. *traigid*; *traigthech* (pedes, pedester), and *traichtechdae*, instead of *triagthechdae* (pedester), are derivations; the neuters have, therefore, perhaps thrown out the *n*, and taken a weak form (*traigthib* = *tragitābis*). The Kymric *troet*, plur. *traet*, appears to rest on stem-extension,—compare Welsh, 2. *cilid*, 3. *cilyd*, with Gaedhelic *céle*; at least, a Kymric *car*, *tan*, stands parallel with the Gaedhelic *cara*, *tene*, so that we have to recognize in the Kymric forms rather the nominative, than, as in the Romance languages, the accusative (see further on). The comparison made in the article on declension (page 68) between the Kymric *guiliat* and the Gaedhelic *filed* falls to the ground with the explanation of Zeuss; see the corrections to pages 149 and 806, at the end of the *Grammatica Celtica*.

I cannot as yet make up my mind to give up my former view respecting the feminines in the Ordo Prior, Ser. 5 of Zeuss, namely, that an almost complete fusion of the *i*- and *â*-stems took place, and that only few relics of a stricter separation of the forms have been preserved. Along with the acc. plur. in *-i*, to which *súli* Z. 339, likewise belongs, there occur, however, forms with *-a* from undoubted *i*-stems, as *gabála*; along with the dative in *-aib*, forms occur in *ib* from *â*-stems, as *airmib* from *áram*, *sléibib* from *sliab*; so that *nimib* also does not prove a stem **nami* (the nom. *nim* along with *nem*, acc. *nem*, the adjective *nemde* = **nimatya* seems to point to **nimá*, as also the Kymric *nef*, which perfectly corresponds to the feminine of the adjective in the Welsh, while *i*, *u*, disappear without umlaut in the Kymric; further, that *nem*- never occurs before the endings with *e*, *i*, but always *nim*-; the gen. plur. *nime* is however remarkable). But I cannot adopt Mr. Stokes' view about the gen. sing. in *-e*, *-a*; for, in the first place we should not start from Sanskrit *-ês*, but from the fundamental form *-ais* (or *ayas*?), out of which *-a* (*o*), and *-e* could be developed in the masculine stems; but *-yás* is a special Sanskrit form, which does not again occur in any European language (for that *πόλειως* is not to be explained from it, but

from **πόλεμος*, is proved by the Homeric *πόλεμος*, the unjustly attacked masc. *μάντης*, and the neuter *ἄσπεως*, which, although questioned, is a well-attested form with the Tragic Poets); secondly, because umlaut is as little known before *a* (*o*) among *i*-stems as *a*-stems: compare *flatha*, *flatho*, or even *focheda*, *fochodo*; *a* occurs even before *-e* in *ergabale*; we could not consequently lay down as a basis any such form as *-yas*, and must, as I believe, assume that the umlaut in both classes has only been introduced inorganically with the change of the *a* into *e*.⁶⁷ The analogy of the gen. plur., especially the invaluable *nandula*,⁶⁸ appears even to speak in favour of our starting, both here and in the masculine of Ser. III., from *-ajas* (not from *-ais*).

As regards the *i*-stems, it appears to me more and more probable, that they have almost throughout passed, as in the Greek, into the *ia*-class (*πότνια* = *patnî*, etc.)

I have found the umlaut in the dative of the *u*-stems, in *immognom*, Z. 984.

§. 10. On the Celtic Dual.

Agreeably to the wish of Mr. Stokes, I here give my views about the Celtic Dual. It appears to me that the answering of two preliminary questions is in the first place needful: 1. has the Celtic a dual to show? 2. how much of it is preserved?

As regards the first question, there can be no doubt that the declension of the numeral *two* presents us with true dual-forms; for the nom. and acc. masc. *dá* (as it stands written in all examples, more correctly however *dá*, compare *dáu*, Zeuss 369, and Welsh 1. 2. *dou*, 3. *deu*, now *dau*) exactly represents the Sanskrit *dváu*, Latin *duo*, Greek *δύο* for the older *δύω* (*δύω* in *δώδεκα*), and the primitive vocalic ending is proved by *eter dá son*. Z. 197. The nom. and acc. fem *dí* = Welsh 2. *dui*, 3. *dwy*, also agrees exactly with the Sanskrit *dvé*, Slavonic *dŭvě*, Lithuanian *dvi*; the dative *deib ñdillib* evidently points back, according to the correct observations of Stokes, to a **dvábhim* weakened from *dvábhyám* (or rather **dvabhim*, cf. *δυοῖν* instead of *δυόφιν*). We have consequently also to refer the genitive *dá* to **dvaaus* = Skr. *drayós*, at all events the aspiration in *dá charpat* is erroneous;⁶⁹ the *n* in the nom. and acc. neut. is however difficult to explain. But that dual-forms are likewise preserved in the declension of substantives, is proved by the peculiarity of the Kymric

⁶⁷ [See notes 58, 59, pp. 75, 76.]

⁶⁸ [xxxiv. *Dúla* is, unfortunately, only found in a Middle Irish MS.: in Old Irish MSS. it is always either *dúle* or *dúile*.]

⁶⁹ [It is possible that the aspiration after the genitive dual is correct, as this case ends only in Sanskrit in *s*, but in a vowel in Zend, Lithuanian, Slavonic.]

dialects to put, after the numeral 2, the same forms as in the singular. The Welsh *uab* instead of *mab* in (W. 3) *deu uab*,—the Gaedhelic *macc* in *da macc*, is evidently as little a true singular form as the Gaedh. *fer* after *cét* and *míle* is a true nom. sing.; but the form of the nom. sing comes just as well where it distinguishes itself from the only conceivable genitive plural, as here, where the greatest similarity exists between the genitive plural and the nominative singular; in *deu uab* = *da macc* a true dual has consequently been preserved (as the primitive form of substantives has generally been preserved in the Kymric after numerals, e.g. *trimeib* = Gaedh. *trí maice*, that it is **trís maqví*, instead of the usual *meibion*), and the agreement of the nom. dual with the nom. sing. in most cases, caused by the Celtic phonetic laws, has led in other cases to an unwarranted extension of the singular form. The Celtic with its dual in the nom. of substantives stands therefore in an interesting contrast to the Teutonic languages, which had already lost the dual in the substantive in its earliest stage, but have preserved it in the Gothic verb.

But the detection of the nom. dual leaves the second question still unanswered. Even in the Greek the genitive-locative is lost, and replaced by the form of the instrumental-dative-ablative; *duo* and *ambo* in the Latin have not remained in undisturbed possession of the accusative, indeed the nom. is replaced in the feminine by *duae*; nay even the Lithuanian, notwithstanding its close affinity to the Slavonian (the only European language which has completely preserved the dual in all forms), has undoubtedly lost the locative, and very probably replaced the genitive by the genitive plural (in spite of Bopp's opposite view, compare Gram. I. 2 Ed. 442; Schleicher, Lith. Gram. 171;—according to Schleicher Beiträge, I. 115, *s* is not dropped in Lithuanian). It need not therefore at all surprise us, if all the dual cases have not been preserved in Irish, and the less so, as the Gaedhelic, like the Kymric adjective, always appears in the plural: Gaedh. *da druith aegeptacdi*, *da ngruad corera*, *da nainm cosmaili*; W. (3) *deu was ieueine*. In fact it may be proved, that even the substantives of the *ordo prior* (see Appendix I.) series 2 and 5, consequently *a*-stems and feminines, and all consonant stems (*ordo posterior*), have lost the genitive dual, and replaced it by the genitive plural. The primitive ending of this case *-aus* = Skr. *-ós*, could scarcely ever (if the phonetic laws laid down in Gram. Celt. I., 165 *sqq.* are correct; and that they are, the almost transparent clearness in which the greater part of the case-endings appear according to them, is a guarantee) so wholly disappear as that, in Old Irish at least, an *-a* as a contraction of *-ā* or *-au* would not have remained; but as we

find not alone from consonantal stems *da arad*, but also from *a*-stems *da-tarb*, *dú macc*, *dú charpat* (instead of *carpat*), *da lethcend* (no doubt more correctly *lethchend*, as a vowel (*i*) has dropped out in the composition, stem *lethi*=Lat. *lātus*, Gr. *πλάτος*, *lethchenn* is *ἡμίκραιρα*), *da carachtar*, nay even from *á*-stems (*indarann*) without endings, we must look upon them as genitive plurals, which, as in the Lithuanian, have taken the place of the genitive dual. (To the preceding examples may be further added a *dašyl*. Z. 369, that is a *dú sillab*, with a wrong mortification point; I am in doubt about the stem of *da og*, whether it is *ogi* or *oga*?) The form of the article *in*, also, which even as arising from *innan* is very strange, does not admit of being at all explained from *innás* (*innaus*). The *dd* in *inddái aimserda* is probably only a sign that *dú* should not be aspirated. In the same way we shall consequently have also to explain the forms of the *ia*-stems—*dagutae*, *indá gutae* fem.; *i*-stems—*inda leithesin* (*n.* or *m.*); *u*-stems—*inddái aimserda*, *da lino*, which might admit of being explained perhaps otherwise also as real dual forms. It is evidently an accident that we should find just here a form in *-o* among *u*-stems, while the genitive plural otherwise generally ends in *-e*, and only once in *-a* (Stokes, Beitr. I. 346); and least of all should it have misled Zeuss to place even in series 1 and 2 the form of the genitive singular in the paradigm. The dative remains doubtful, as the whole of the forms may be explained as well from *-bin* as from *-bis*, and the Greek and Lithuanian have just preserved this case: *indibmaigib*, *dib cetaib* Z. 311, 313, *deib indillib*, *dondib dlignedib remeperthib*, *dib rannaib*, *dib consonaib* 194, *indib nuarib deac*, *dimutaib*, *deib traigthib*; I would, however, almost prefer, here also, the explanation as dative plural, because the Celtic has retained so very much less of the dual than the Greek and Lithuanian, no verbal and no adjectival forms.

Of undoubted dual-forms we accordingly have only the nom. and acc. of substantives, and the whole of the cases of the numeral two. The masculine *a*-stems, with the exception of the one-syllabled *dá*, *da*, have thrown off the ending *-a*, shortened from *-á*, (= Ved. Slav. *-á*, Gr. *-ω*, Lat. *ō*) or *-au* (= Skr. *-āu*), hence nom. *da macc*, *da mod*, *da son*, acc. *indamér* (?), *inda articul*, *eter da son*, Z. 197; the *ar* II. *canoín* (pro duobus canonicis) kindly communicated by Mr. Stokes, is consequently to be completed *dá canoinech* (more correctly *chanoinech*). The neuters, in deviating from the Sanskrit and Slavonian, connect themselves with the Greek and Latin, inasmuch as they likewise presuppose an ending *-a*, older *-á* (or *-au*)—*da nigrúad corcra*, *adánimechtar*, *da cenél*; hence from *ia*-stems—*danorpe*, *da llae*, *indagné*, acc. masc.

or neut. *da sale* (dat. sig. *dit sailiu* Incant. Sg. in Zeuss). A neuter *da g* (two *g*'s) also appears, 710. The feminine *â*-stems agree on the other hand with the Skr. *-ê*, Slav. *-ě*, Lith. *-i*, for they show the after-action of *-i*, *-î* (still preserved in *dí* = *dvê*, Welsh *dui*): nom. *di flisc* (sing. *flesc.* = **flisca*), *di huáir*, acc. *di rainn*, *di árim*, *di persin*, *indibrethirso*; from *iâ*-stems nom. *digutai*, *díguttai*, *di míli*, Z. 315, acc. *indiguthaighthi airdixi*, 966. The *i*- and *u*-stems appear to have simply lengthened the end-vowel. This was of course followed by a subsequent shortening, and then a dropping of the lengthened vowel: hence nom. masc. *da preceptóir* from *-óri*, *-óri*, *da atarcud* from *-idu*, *-idû* (gen. sing. *attaircedo*, nom. *attarcud* like *spirit*, gen. *spirito*, *spirto*, *spiruto*), acc. masc. *danóg*, *dánog* from **nógû*, masc. or neut. *indarecht* from **rechtû*, acc. neut. *indá errend* from *-randî*?

The *in* of the article consequently arises in the nom. and acc. masc. and neut. from **inna*, **innâ*; in the fem. from **inni*, **innî*. It appears to have penetrated in the other cases in the same way that in the Greek *-ου* has done in the genitive, or *τῷ* in feminines; the frequent interchange, in the Irish, of the dat. and acc. after prepositions, is also to be taken into account, as well as the dying out of the cases which has been observed in Modern Irish (p. 80). The *in* cannot be well explained, organically, at least, in the gen., in the dative not at all.

Very few dual forms of consonantal stems have been unfortunately preserved. Of these the nom. *da druith*, and acc. *da sligid*, agree best with the Greek *-ε*, for a Sanskrit *-âu*, or a Vedic *-â*, would have led rather to *druad* and *sliged*. Nom. *dú thene*, acc. *da are*, nom. acc. *dá ainm*, *da nainm* appears to be decidedly inorganic. The frequent coincidence of the form with that of the nom. sing. has here, no doubt, brought about the invasion of the singular forms.

In conclusion, it should not be forgotten, that in the Kymric not only are the commencing consonants in the substantives softened in the dual, but likewise in the following adjective, which is a proof that here also the nom. and acc. dual ended primitively in a vowel.

§. 11. On the Article in Modern Irish.

In the modern Irish article *an*, about the relation of which to the old *int*, *ind*, I could not hitherto come to a satisfactory conclusion, I now recognize, with certainty, an intrusion of the neutral form, as the most colourless and weakest, precisely as the Middle High German had formed to its neuter *daz* a masculine and feminine *der*, *diu*, and the Lithuanian and Slavonian (to *to*) its *tas*, *ta*, *tũ*, *ta*. The English use of *that* (pronoun) and

the (article) for all genders is especially important in this respect.⁷⁰

It is a fact worthy of attention, but one hitherto scarcely noticed, that, besides the coarser, I may say the material, action of languages upon one another, which shows itself in the evident borrowing of words and forms, a finer, a more spiritual influence is exerted. Thus, certain words, without being borrowed, are preserved living and active, by the neighbourhood of other languages, and some forms of thought and sound, words, expressions, conversational phrases, are so to say, indigenous in the soil. A comparative syntax would bring many examples of this kind to light, especially in the languages which have grown up on Celtic ground, and might determine how much may be ascribed to accident, and how much to intellectual influences. In the Phonology, for example, the Kymric *ui*, *oi*, representing the Gaedhelic *é* (even in loan-words like *cera*, W. 2. *kuyr*, 3. *kwyr*, Cornish V. *coir*, Armoric *coar*) is parallel with the French *oi*, representing the Latin *ê* (avoir = habere); again, the Celtic action of the final sound on the following word has a parallel in the transporting of the final *s* to the next word in *les amis*, etc. Among the words and word-forms which have been preserved on Celtic ground, we may mention: English, *witness* = Gaedhelic *fiadnis* (testimonium), and the English names in *-ton*, along with the Gaulish in *-dúnun*. Of importance in Syntax are: the French intercalation of the pronoun in *je t'aime*, *je ne t'aime pas*, as in both branches of the Celtic; the French *c'est moi* and the English *it is me* = Gaedhelic *ismé*; the English leaving out of the relative in, *the man (whom) I saw*, as in the Gaedhelic.⁷¹ Now, in this respect the English *that*, *the*, for all genders, are not without importance for the Celtic also, and permit us to conclude, that in the Modern Irish *an fear* for the Old Irish *in fer*, an analogous process has taken place.—The relative *an* (*a*, *no*, *n*) appears to belong to the same stem; we may compare the fluctuation between the relative and the demonstrative in the Homeric language, the peculiar use of the Old Persian *hya*, which Bopp also,⁷² as I myself did,⁷³ now looks upon as an article, and the German antiquated relative *so*.

⁷⁰ [xxxii. This is an ingenious error. The neut. article is quite lost in Middle Irish, and the Modern Irish article *an* (*an t* before a vocalic anlaut), bears the same relation to the Old Irish *in* (*int*) that the Modern Irish preposition *an* (written *a n*-) does to the Old Irish *in*; or the Modern Irish interrogative particle *an* does to the same particle in the Old Irish, viz., *in*. But here, as elsewhere, more is to be gained from Ebel's mistakes than from many another man's truths. The relative *an*, *a*, is doubtless identical in form with the neut. article = **sa-n*. Ebel has since corrected this error. See, *infra*, On Phonology in Irish, §. 2. p. 138.]

⁷¹ [But the two last named constructions are found also in the Scandinavian languages, where no Celtic influence is possible.]

⁷² Vergl. Gram. I. 473. 2nd Ed.

⁷³ Zeitschrift f. Vergl. Sp. v. 305.

§. 12. *On the So-called Prosthetic n.*

[The term Prosthetic *n*, used by Zeuss, is what Irish grammarians erroneously call an eclipsing *n*. Mr. Stokes in the papers above quoted, and Dr. Ebel here show that this *n*, in the majority of cases, belonged to the word immediately preceding that to which it seems prefixed.]

Mr. Stokes, in his valuable observations on the Irish declension, has agreed with my remark, that the *n* of the inflexion has been preserved in TEORA NGUTTAE, and here and there also besides the *n* of the article, and has communicated several examples. Zeuss, curiously enough, has altogether misunderstood this *n*,⁷⁴ and everywhere looked upon it either as a superfluous addition or as a shorter form of the article, *e. g.*, before AILE, although there it appears only in the nom. neut. and acc. sing. and gen. plur. of all of the three genders,—often in combinations where no article is possible. As a relic of the article I have met with this *n*, only in very few places, and then as the remains of the shortest forms: AN (A-N-) in TRESNGNÉ, Z. 611, where the E of TRES still indicates an A dropped out, and NI EPUR NÍSIN (non dico hoc, instead of ANÍSIN) 352; IN (acc. dual) in ETARNDIRAINN 278, 614, probably as gen. dual in CECHTARNÁI, NECHNARNÁI 369 (compare the plur. INNAN ÁI). The *n* in LASIN NGUTAI (instead of LASINN GUTAI) 619, 1017. The most of the other examples are clear enough. I shall give here some proofs, which may easily be increased. Nom. and acc. neut. FOLAD NAILL, OLCC NAILL, DES. (*i. e.*, DESIMRECHT) NAILL, PRONOMEN NAILL 363, IMBÉLRE NAILL 580, MÓR NAMRI 596, 889, GRAD NEPSCUIP 1048, AM. NÁCH ANNSE NDUIB (ut non difficile vobis) 703, HUARE ISDILMAIN NDOCHECHTAR 369, ANDÉDE NÍSIU 319, 704, ANUATHATH NÍSIU 353, ANDLÍGED NÍSIU 353, MÓOR NIMNITH 21, MÓR NUILE 609, 889, DLIGETH NIMMOGNAMA 984, CACH MBELRE 489, FRI CACHNAE 319, MIND NABSTALACTE 229, RAD NDÉ 55, ÁTA DECHOR NAIMSIRE 1037, ÁTA DECHOR NETARRU 374, ISSAIN CACHNAE (previously, ILSENMAN) 367, DERED MBETHO 985, IS-FUATH NEPERTA 985, SAINRETH NANMMAE 1025, ARACUMACTTE NANGID NÍ ÁRMISOM ARCHUMACTTE ([nam] potestatem nequam non numerat ipse pro potestate) 247, NÍFAIL NACH NAICCIDIT (non est ullum accidens) 1016, NICUMSCAICHTHI CUMACHTÆ NAIRI (non mutanda potestas propterea) 1015, NÍ FITIR IMORRO OLC NETIR (nescit autem malum omnino) 1003, LAA mBRÁTHA 479, ALLAITHE NDEDENACHDIUD [no doubt ALLAITHEN DÉDENACH DIUD = die extremo (acc. temp.) in fine] 316, ISNOICHTÉCH RÉ NIUIL (est undetricenale spatium Julii) 1075, ISGNÁTH GÁO ET FÍR NAND 359. So also—arindí atreba toxal NAND 359? Acc. masc. CO RÍG

⁷⁴ [xxxii. Not so. See Zeuss G. C., page 263, where he conjectures that the very form cited here by Ebel, *teora n*, may stand for *teoran*.]

n ILAINGLECH Colman's hymn—Lib. Hymn. 10 (to the many angel'd king), according to a friendly communication of Mr. Stokes, COFER *n*AILE Z. 884, MARUDBAITSÍUS NACH*n*AILE 434, INBITH *n*UILE 366, TRESINNÓEDÉCDE *n*UILE 1074, FOCHOSMUILIUS *n*ADARCÆ 481, INFOGUR *n*ÍSIN 1014; without the article, BESTATID*n*ÍSIN 611, ÁES *n*ESCI 1074 (three times), NIFAIL CHUMSCUGUD *n*HUIRDD AND 369, TAR RECHT *n*AICNID 613 RECHT *n*IMBIDI 229, LETH *n*GO THO 1013 (consequently LETH is also masc. like RECHT), CONROIGSET DIA *n*AIRIUÍBSI 1076, AIRTHECH. CACHGUTÆ AGUTH *n*INDI 966, TODDIUSGAT GUTH *n*INTIU 1017, CEN RIAN *n*ETROM 616. So also no doubt: NACH *n*AILE 368, TÓINIUD *n*IRESSACH 229, NERT *n*AINMNEDO 975, ATTLUGUD *n*BUIDE 1048 (the acc. instead of the dat.?), CACHNOEN CRANN 999? I am not quite certain of the gender in, FRI CUMTACH *n*ECOLSO 260, CUMTACH *n*IRISSE 1045, ECOSC *n*ABSTAL 585, TAIBRITH ATÉICHTÉ *n*DOIB (no doubt neuter) 56. Acc. fem. FRICACH *n*AIMSIR 367, CÉCH *n*AIDCHE (instead of AIDCHI) 888, ISARNACH *n*INDOCBÁIL MÓIR 262, HI CACH *n*DEILB 7 HI CACH TARMORCENN 367 (translated by Zeuss as the dat.), I PERSIN *n*AILI 363, FRIRAINN *n*AILI 608, CEN GUTAI *n*ETARRU 1017; also doubtless, ROSCARSAM FRIB DENUS *n*BEICC 310, HIRES *n*ABARCHE 229, SERC *n*DEE 55 (just as NEM, DELB occur in the acc.), CEN ALPAI *n*ETARRU 616,⁷⁵ FRIALPAI *n*DESIU 595. Gen. plur. masc. INNAMBALL *n*AILE 229; fem. NA LITER *n*AILE 1012, LITER *n*AILE 1012; neut. ANMAN *n*ADIECHT 433.

Some spurious prepositions, it would appear, may be recognized as accusative forms by the *n*, most distinctly TARÉSI in—U. TARHESI *n*I (U for I) 1012, OLCC TARÉSI *n*UILCC 617, but INDEGAID also in—INDEGAID *n*DÉ 619, INDEGAID *n*GUTTÆ 1013, and DOCHUM in—DOCHUM *n*DÉE 620, DOCHUM *n*IRISSE 461 (bis).

The *n* of AINM-N belongs to the stem in—AINM *n*APSTIL 229, AINM *n*HETHA 255, AINM *n*GNÚSO 975, AINM *n*DILES 1025, DOBERR AINM *n*DOIB 457.⁷⁶ According to this my observation (p. 65), "probably derived, however, from *m*, and not a primitive *n*", must consequently be cancelled, and the single example with an aspiration AINM THRIÚIN Z. 249, considered as an irregularity.⁷⁷ As yet I have failed in finding for the masculine and feminine *n*-stems an example of the aspiration, or of a mortified *s*, *f*; I have also, however, nowhere found an *n*; it conse-

⁷⁵ According to Stokes (Beiträge zur vergleichenden Sprachforschung I. 468) the *n* of ALPAI-N and INRINDIDE-N belongs to the stem.

⁷⁶ See last note.

⁷⁷ [xxxiii. The *n* in ainm napstil does not belong to the stem, but (as in pronomen naill cited by Dr. Ebel himself, *supra*) is simply an example of the natural tendency to prefix after *all* neuters in the nom. and acc. sing. an *n* (*m* before *b*) to the following adjective, if this begin with a vowel or a medial.]

quently appears as if the neuter only preserved the *n* as in the Latin and Slavic,—*ANMEN like NOMEN and IMĕ, while the masculine and feminine dropped it,—*BRITHEMÁ like HOMO and KAMY.

The *n* is much less clear in CECHTARNÁI, NECHTARNÁI Z. 369 (which I consider to be a relic of the gen. dual of the article IN, on account of DOCHECTAR NHÁI, evidently the dative, and of the genitive plural INNAN ÁI), SLIAB NÓSSA 888 (perhaps acc.?), SIRID INRINDIDE NUILE (see note 75) 366, 586, ARBERTAR AS NÓEN TARMOIRCUNN 592, FAR NÓENDEILB 670, AM. INLOCHAIRNN NAFFRACDAI 676, where it appears to be in part actually erroneous; COTÍR NEREND 74, appears to indicate a change of gender (comp. RECHT, LETH, NERT); even there, however, Zeuss also gives FIR NEREND (viri Hiberniæ) with an enigmatical *n*.

There is perhaps a threefold preposition DO-AIR-IN contained in TAIRNGIRE, DURAIRNGERT, DORAINGRED Z. 56, 868; in the same way that CON became mutilated in FRECNDIRC ÉCNDIRC.

But, very strange, the *n* appears very often after verbal forms; mostly, perhaps exclusively, in dependent sentences, frequently after the so-called relative—ASNÓINDAE INSPIRUT 360, ASNED 675, AM. ASNÉ ASSPLENDOR 333, ASNIRESS 456, ASNOIPRED 476, AM. ASNINDEDUR 580, ÓRE ASNDIUL 703, CÉIN BASMBÉO INFER 230, 675, HÓRE ASNAMAIRESSACH 705, LASSE BAS NUÁIN (NUÁIR?) DO 229, ASNDIRRUIDIG[THE] ANAINMSIN 265, AMMI NEULIG 252, CONSECHAT NULCU 457, ATA NAÑMAN SIDI 894, NI CUMCAT CAMAIPH ILLE 7 ISTE BETA NAITHFOILSIGTHECHA DONDÍ AS IPSE 667, INTAIN BES NINUN ACCOBOR LENN 603.⁷⁸

Notwithstanding that several examples still remain unexplained, the vast majority show quite clearly, nevertheless, that the *n* is prosthetic, if at all, only in exceedingly few cases; especially the forms assumed by Zeuss, NAILL, NAILE, NAILI, NÍSIN, NÍSIV, and NAND for AND decidedly fall to the ground.

13. §. On the Degrees of Comparison.

Among the consonantal stems we have not mentioned the interesting *-ns* stems, the comparative, because no declensional forms of them are any longer to be recognized, with the exception of adverbial dative forms, which offer nothing peculiar (*immou*, *magis*, *indoa*, *minus indlaigiu*, *minus*, *intserbu amarius*, *indluindia commotius*). As in the accusative plural, the primitive *-ans* has split itself into *-a* (consonantal stems, feminines, and the article) and *-u* (masc. *a*-stems), so here also we find both forms, the *-a* in the more ancient, the *-u* in the newer secondary formations. Of the former *máa* with its parallel forms,

⁷⁸ May it be, that as in Greek, an *ν ἐφελευστικόν* existed? Stokes also compares *ammi-n* with *ἐσμέν*.

corresponds to the Lat. *major*, Goth. *mais*, *maiza*; the Kymric form, W. *mwy*, Corn. *moy*, Armor. *muy*, which deviates somewhat in the vowel, has still preserved the *j*, *i*, and like all similar forms, has thrown off the final vowel, together with the *s*. *Oa* (minor) appears to have been formed after the superlative *oam* = Skr. *avama*, instead of Skr. *avara*, therefore properly: inferior, deterior; *nessa* = W. *nes* has been already several times compared with the Gothic *nēhv* *nēhvis*, its superlative with the Osc. Umbr. *nesimo*, and the dropping of a guttural surmised; *tressa* (fortior)—cf. W. *traha* (audax, fortis)—exhibits the (in Sanskrit) regular throwing off of the suffix before the comparative ending, in opposition to *trén*, instead of *tresn*? (just as *máo* along with *már*); *messa* (pejor) appears to find its positive in the prefix *mi* (Z. 833) = Goth. *missa*, although the latter aspirates the following consonants; in this respect, however, it has a companion in *du-*, which certainly represents the Skr. *dus-*, Gr. *δυσ-*. The *ss* of the last examples appears to have arisen from *sj*, just as *rr* in *ferr* (melior) = Kymr. *guell*, *gwell*, whose Oscan and Teutonic affinities are compared in the Zeitschr. f. v. Sp. VI. 421, does from *rj*, (compare also Skr. *varíyas*, Gr. *ἀρείων*?). *Lia* (plus) has been elsewhere compared⁷⁹ with the Greek *πλείων*, and *ire* shown to be a comparative.⁸⁰ The only comparative of that kind, which has joined itself to the second formation in the Gaedhelic, *laigiú* or *lugu* (minor)—W. *lleí*, has remained true to the first—places itself alongside the Skr. *laghíyas* = Lat. *levior* but Gr. *ελάσσων*; the substantive *lagait* (parvitas) is derived from this adjective. In the same manner the Gaedh. *siníu* = Lat. *senior*, and the Welsh *hyn*, deviate from one another. Among the Kymric forms *hwý* (longior), *is* (humilior), *uch* (altior), *ieu* (junior) = Skr. *yavíyas* which exhibit the rejection of the suffixes of *hir* = Gaedh. *sir*, *isel*, *uchel* = Gaedh. *úasal*, are particularly interesting.

The second form *u-* is evidently only a contraction from *-iu*, in the same way as *daltu* occurs in the dative of the *ia*-stems instead of *daltiu*, *maccidóndu* in the acc. plur. of the same stems instead of *maccidóndiu*, and *ditu*, *tichtu*, *epeltu* in the nom. sing. of the *tin*-stems instead of *ditiu*, *tichtiu*, *epeltiu*; for the same reason *laigiú* and *lugu*, *uilliu* and *oillu* (plus), *toisigiú* and *tóisechu* (prior) appear side by side. The majority of stems follow this formation, namely all derivative ones, hence *íslíu*, *húaislíu* instead of the Welch *is*, *uch*. In the Kymric *-ach* corresponds to it (with retention of the *s* as *ch*), while the Gaedhelic *-a* has fallen off in the Kymric. The superlative in the Gaedhelic

⁷⁹ [See his paper, *infra*, "On the Loss of *p* in Celtic", p. 161.]

⁸⁰ [See the paper referred to in note 79.]

separated into *-am* and *-em*, does not distinguish itself in the Kymric *-am*. How are these different forms to be explained?

In the first place let us recollect the double formation in the Teutonic and Slavonic, which have been already compared with one another in the Zeitschr. f. v. Sp. v. 309 *sqq.*; as Goth. *-iza*. Church-Slav. *-ii*, so does the Gaedh. *-a* belong almost exclusively to the defective comparatives, as the Goth. *-ôza*, Ch.-Slav. *-êi*, so does the Gaedh. *-iu* attach itself to all secondary formations. We know further that *j* disappears in every position in the Gaedhelic and at least in the middle in the Kymric, except where it is preserved as the vowel *i*. Finally, we found (p. 54), that the ending *-e* (dat. *-iu*) not only represented the Skr. *-ya*, but also frequently *-aya*, an origin which is still sometimes marked by the writing *-ae* (gen. *-ai*). Now as the Kymric forms (and also the single Gaedh. form *ferr*), as well as the analogy of the Teutonic and Slavonic, compel us to assume a shorter form than the Gaedh. *-iu* as the basis of the Gaedh. *-a*, the following hypothesis may best recommend itself:—The Celtic formed two kinds of comparatives, an older one in *-jans*, a newer one in *-ajans* (*-aijans?* *-âjans?*); the *-ns* fell off in both in the Gaedhelic, as in the acc. plur., and left behind a long vowel, which was afterwards shortened; the *j* dropped out in the first form, but left behind some traces in Gaedh. *messa*, *tressa*, *ferr* (?), in W. *myr*, *lleir*, *hwy* (?); in the second, *-aja* contracted itself to *-a* in the Kymric, and *-aj* to *-ê*, *i* in the Gaedhelic; in the Kymric, the *s* remained as *ch* after the (primitively long?) *a*, as in *chwech* six = Gaedhelic *sé*, but fell off with the vowel in the shorter form. If this hypothesis be correct, the *e* (*i*) of the Gaedhelic superlative (stem *-ima*, nom. *-em*, gen. *-im*) must have been shortened from *ê* or *î*.

In Modern Irish, *-iu* has become *e* (passing through *i*?) as in the nominatives of the *n*-stems, e. g. *laige* from *laigiú*, like *naoidhe*, from *nóidiú* (compare Pictet, Beitrage I. 83).⁸¹

⁸¹ [The following is the passage referred to. "*Eriu*, as it appears, is a still more ancient form of the nominative and accusative. It is so in two quotations by O'Connor from Eochaid's poems (belonging to the ninth century—Proleg. II., 40, 42).

H Eriu oll ordnitt Gaedil,—Hiberniam totam ordinavit Gadelius; *H Eriu con huail con idnaib*,—Hibernia cum gloria, cum armis (probably the accusative which cannot be determined, as the continuation is wanting). For this ending *iu* instead of the later *e*, compare in Zeuss (Gram. Celt., 268), *nóidiú*, infans, *frescsiu*, spes, *deicsiu*, visio, *ermitiu*, reverentia, etc. (later and now *naoidhe*, *fresce*, *deicse*, *airmidhe*), all of them having *n*, *nn* in the oblique case, where however the *u* has disappeared, *noiden*, infantis, *deicsen*, visionis, etc., as in *Erenn*, *Eireann*. The proper name *Fridriu* or *Frigríu* (Ordnance Survey of Ireland), poem of Aileach, l. 40, 43), whose genitive is *Fridrenn* (39), *Frigrínn* (1), *Frigrínd* (2, 53) is another example.]

ON THE POSITION OF THE CELTIC.

§. 1. *Views regarding the special affinities of the Celtic, and words borrowed from the Latin.*

THE European members of the Aryan family of languages form a chain, both ends of which reach over into Asia. The Greek undoubtedly shows the most numerous points of contact with the Asiatic tongues. On the other hand, however, the Slavonian exhibits the greatest number of special agreements with the Iranian.⁸² So in like manner the neighbouring links, within the chain itself, are universally acknowledged to be the most closely connected with one another, Greek and Italian, Slavonian and Lithuanian, Lito-Slavonian and Teutonic. Very naturally, therefore, in the Celtic also, which lies nearly in the middle between the others, most points of contact will be found with the Italic on the one side and the Teutonic on the other, and through both with the other already established branches of the European division. It is, of course, very difficult to decide to which of the two it stands nearest, perhaps even impossible at present, when, as regards the question of the separation of languages, so much is still debateable, and when a comparative syntax is still quite wanting.

Lottner has pronounced in favour of the "Northern"; Schleicher for the Pelasgian languages; both, notwithstanding the divergence of their views in other respects, agree in placing the Latin nearer to the Celtic than to the Greek. I look upon so much only as proved, that the Celtic stands closer to the Latin than to the Greek. The circumstance that feminines in *-oc*, *-us*, only occur in the Classic languages appears to me to prove conclusively a nearer connection of those languages with each other than with any other. In other respects also I have not adopted Lottner's view in so wholly unconditional a way as Schleicher appears to assume; but, on the contrary, I have often expressly

⁸² To this category belongs, besides many other points that Schleicher has brought forward, also the frequent occurrence of the suffix *-ka* where it is foreign to other tongues, *e. g.*, Slav. *sladükä* (dulcis) = Lith. *saldus*, like Old Persian *vazarka* (magnus) = Skr. *vīhat*.

indicated, in general as well as in particular, the points of contact of the Celtic with the Classic languages. This shall not, however, deter me from exposing the points of agreement of the Celtic with the northern tongues, in accordance with his request. Only I shall take the liberty of beginning with a point which Schleicher designedly left aside, namely, with the vocabulary of the Celtic, partly in consequence of the accidental direction of my studies, partly in order to at once meet a foregone conclusion, that many (although certainly not Schleicher) might draw from this very source in favour of a closer relationship with the Latin.

Indeed, it appears at first sight as if the Celtic languages had an especially large number of words in common with the Latin. If, however, one looks closer, by far the greatest number (even in Old Gaedhelic, but still more in the Kymric dialects) are seen to be foreign or loan-words, often so deceptively assimilated, that when one is about to take off the mask, he involuntarily draws back his hand. So says, for example, Zeuss (p. 80): *Non tanguntur certe tenues in vocibus peregrinis receptis*. But words like *accidit* ($t=nt$), *ethemlagas* ($th=t$) which yet, unquestionably do not belong to the earliest loans, show what little claim this rule can have to general validity. At most, we can only judge thereby of the greater or lesser perfection of the appropriation and mastery of the foreign material, and in this respect the Kymric surpasses almost the Gaedhelic.

I have constructed two glossaries from the *Grammatica Celtica*, of which the Old Gaedhelic one may be considered to be pretty complete; the Kymric one may, however, undergo considerable enlargement. From these I give the following lists, as the foundation of further glossarial researches. In order to supply in some degree at least the want of an organic orthography, I have retained here also the method of denoting the Kymric dialects which I adopted on a former occasion;⁸³ unmarked words are Old Gaedhelic. I did not like to pass over the Kymric, because the peculiar phonetic relations of the two branches of the Celtic family necessitate a mutual supplementing and explanation; besides, loan-words are often accidentally wanting in the old documents of the one or other dialect in Zeuss. In the case of the loan-words, a peculiar difficulty occurs in the Kymric dialects, as it is often scarcely possible to decide whether a word has been introduced directly from the Latin, or through the French, Anglo-Norman, or even the English. The decision

⁸³ Beitr., I. 427. [See APPENDIX II., p. 184, for an explanation of the abbreviations used in the following lists.]

is the more difficult because the Kymric vowel-changes mostly agree with the French (especially in the treatment of *ê*); and because in the case of the dialects with regard to which the idea of such a medium would first arise, Cornish and Armorican, our sources are too modern to help us to answer the question from the chronological side. In order to avoid, as much as possible, mistakes in this respect, I have only indicated the medium where it appeared to me certain. The Old Gaedhelic, especially, contains a great number of Latin words (or of Greek ones borrowed through the Latin) from the domain of the Church and of science; but others also are not wanting.

LATIN LOAN-WORDS IN OLD CELTIC.

abbas=[*ab*], V. *abat*, W. 2. pl. *ab-badeu*.

[*abecedarium*, *aibgiter*, W. *egwyddor*.]

abstinentia=*abstanit*.

accentus=*aiccent aiccent*, d. *aiccinnd*; [W. 3 *acen*.]

accidens=*accidit aiccidit n*.

[*acer*, *aicher*, W. 3 *egr*.]

acetum : *áctegim* (aceo).

[*actualis*, *achtail*.]

acutus=*acuit*; *noacuitgíde* (acuenda esset).

adjectivum=*adiect*, *adiecht*.

adorare : *adras* (qui adorat), *adrorsat* (adoraverunt), *adrad* (adoratio).

adulter-ium=*adaltr-as*.

[*adversarius* Mid. Ir. *aibherseóir*.]

altare=*altóir f*, V. *altor*; [W. 3. *allor*.]

altum=W. 2 *alt allt all*, 3. *allt* (collis,

acclivitas, scopulus), V. *als* (litus).

anachoreta=W. *ancar*.

ancora=*ingor*, V. *ancar*, [W. 3. *angor*], (the *i* as in *ind-* (*ἀντι*) and *imb-* (*ἀμφι*) and *g* like *d* in *ind-* (Gaul. *ande-*) make the borrowing a little doubtful; the borrowing of the same word in other European languages (compare for instance Lith. *inkaras*), and of other naval expressions in the Celtic, speak however for it).

angelus=*angel aingel*, V. *aíl*, P. *eyll el*, Arm. *ael el hel*.

animal=W. 3. *aniueil*, pl. W. 2. *any-ueilyeit*, 3. *anníueileit aníueileit anníueileit*, Arm. *aneualet*.

apostolus=*apstal*, V. Arm. *apostol*, P. pl. *abestely*.

applicare : Arm. *em em applicuet*. (applycate vos).

[*aratum*, *arathar* W. 3. *aradr*.]

argentum=[*airget*, *argat*], W. 2. *ariant*,

3. *aryant*, V. *argans*, P. *arghans*, Arm. *argant*. (External evidence of the borrowing is no doubt wanting, the evident borrowing of the name of gold, as well as physico-geographical reasons, speak however in its favour). [? cf. Gaulish *Argentoratum*.]

(?) arma=*arm*, *arma*, d. *ísind-airmm* (in armatura), W. 2. 3. *arueu arfeu*, P. *arvow*.

armilla=W. 1. *armel*.

[*ars*, *art*.]

articulus=*articol*, gen. sing.=n. pl. *articuil*, d. *artucol*.

asinus=[*asan*], W. 3. *assen*, V. P. *asen* (The grounds for the borrowing are elsewhere given).

atomum=*atom*, in the phrase 7 *unga* 7 *atom* (et uncia et atomum), not recognized by Zeuss, 312, 1076.

auctoritas=*augtorás*.

[*Augusti* (mensis), *augaist*, W. *awst*.]

aurum=*ór* (gen. *óir*), W. 2. 3. V. *eur*, P. *owr*, Arm. *aour*. (The *r* undoubtedly indicates borrowing, cf. Sabin. *ausum* and Lith. *auksas*. Grimm consequently errs in his *Geschichte d. d. Sprache* 1027).

[*baculum*, *bachall*, W. 3. *bagl*.]

[*balbus*, *balb*.]

[*baptista*, *bauptaist*.]

baptizo=*baúsim*; acc. *baúthis*, dat. *baúthius*, W. 3. *bedyd m*, Arm. *badez* (baptisma).

barba=W. 3. *baraf*, *baryf*; V. *barf* *baref*. (The borrowing is no doubt remarkable, I cannot however explain otherwise *f* in contradistinction to Lith. *barzdà*, Slav. *brada*, O.H.G. *bart*.)

[*barca*, *barc*, W. *barg*.]

M. Lat. *baro*=W. 3. *barwn*.

[*basilica, baislic.*]

[*basium, bay, P.*]

battuere: V. *bat* (numisma), W. 2. V.

bathor (numularius, trapezita), P.

batales (proeliari).

[*beatus*=Mid. Ir. *biat.*]

benedico: *bendachæ* (benedicis), *nobben-dachât* (salutant vos), *indatbendachub* (benedicam te); *bendacht*, W. 3. *bendith*, Arm. *bennoez* (benedictio); W. 2. *bendicetic*, P. *benegis*, Arm. *ben(n)iquet* (benedictus).

bestia=W. 3. *buyst-uil* (appears to be compounded with *nûl* like the German *Maulthier*, etc.), O. Gaedh. *béisti* f. pl.

blasphemare (Fr. *blâmer*)=P. *blamyé*.

[Med. Lat. *brace, braich*, W. 3. and V. *brag.*]

[*brachium, bracc*, V. *brech*, W. 3. *breich.*]

brassica=*braisech*.

brevis (syllaba)=*breib*.

broccus brocchus (see Diez), Fr. *broche*=V. *broche* (spinter). [Mid. Ir. *proiste.*]

[*bullâ, boll*, W. *bwl.*]

buxus=V. *boz*.

calamus=[W. 1. *calamennou*], W. 3. *ke-leu-yn* m. (singulative); V. *kalagueh* (stramentum).

M. Lat. *caldaria*=W. 1. *callaur*, V. *cultor*. [Arm. *kaoter.*]

[*callidus, callaid.*]

calix=[*cailech*], V. *kelegel*.

[*camisia, cainse.*]

[*cancellâ, caingel.*]

cancellarius=W. 2. *kaghellaur, kyghel-laur*.

cancer=W. 1., V. *cancher*.

candela=V. *cantuil*, W. 3. *cannwyll*;

candelarius=*caindlóir*, Z. 744; *candelabrum*: V. *cantul-bren*.

canon=acc. *canóin*.

[*capellanus*, Mid. Ir. *cabellanacht.*]

capistrum=W. 1. *cepister*, 2. *kebyster*, pl. *kebystreu kebesteryeu*.

[*capitulus, caiptel.*]

[*captus, cacht*, W. 3. *caeth.*]

[*caput, caut.*]

carbunculus=*carmocol* Z. 1163. [W. 3. *carbwncl.*]

carcer=*carcar* (gen. pl. *carcre*, dat *carcâr*); W. 3. *karchar*.

(?) *caritas* (cf. *charité*)=K. * *cardaut* (beneficium) in W. 3. *cardotta* (mendicare). The ending *-tut* (=tât) occurs especially in loan-words.

car(o)enum instead of *car(o)enaria*

=V. *ceroïn* (cupa), [W. 1. *ceroenhou*, gl. *dolea.*] W. 3. *kerwyn* (lacus, lebes).

[*carpentum, carpat.*]

caseus=[*câse*], W. 2. *kaus*, 3. *caws*, V. *caws cos*.

castellum=[*caisel*], pl. W. 2. *cestill*, 2. *cestyll*.

[*castus, cast*; *castitas, castoit.*]

catena=W. 3. *cadwyn*.

cathedra=W. 3. *cadeir* (sella), Arm. *cador*.

[*catholicus, cathlac.*]

[Med. Lat. *cattus*=V. *kat*, W. 3. *cath.*]

[*caucus, cuach*, W. 3. *cawg.*]

caules=V. *caul* (olera).

causa=dat. *côis*.

[*cedria, cedir.*]

[*cella, cell*, V. *tal-gel* gl. *cellarium.*]

census=*cis* (census, fiscus, vectigal).

cera=[*cêr*], W. 2. *kuyr*, 3. *kwyr*, V. *coir*, Arm. *côar*.

[*cervical, cêrchaill.*]

[*cervisia, cêirbsire*, "brewer".]

character=*carachtar* n. (littera).

chorda=P. pl. *kerdyn* (funes), V. *cor-den* (fidis).

christianus=[*cresen*], W. 3. *cristawn*, Arm. *christen*.

[*chrisma, crismal.*]

[*cilicium, cilic.*]

circare (see Diez)=W. 3. *kyrchu*, Arm. *querchat, querchit* (querere, pergere, intrare).

[*circinus, cercenn*, W. 1. *circhinn.*]

circulus=acc. *cercol*.

circumflexus=*circumflex*.

civitas=W. 3. *kiwtawt*; *kiwtawtwyr* (cives).

clarus=P. *clear*, Arm. *scler* (with prefixed s).

[*classis, clais.*]

[*claustrum, V. clauster, cloister.*]

clericus=[*clêrech*], V. *cloireg*, Arm. *cloarec*.

[*clima, climata*, pl.]

M. Lat. *clocca*=[*clocc.*], V. *cloch*; *clechir* (tintinnabulum), *clechti* (cloccarium), *clochmuer* (campana).

coccus: W. 3. *coch* (ruber), pl. *cochyon*.

coloni=W. 3. *kalaned* pl. (habitatores).

(?) *columba*=*colum*, V. *colom*, Arm. *coulm*, (cf. Slav. *golqbi* in Schleicher, 106).

columna=W. 2. *kolouen* (i.e. *columnina*, with an intercalated vowel), O. Gaedh. [*colomna*, n. pl.], *columnnat* (columella).

- *cominitiare, Fr. commencer; Arm. *comance* (initium), m=mm.
 commatres=Arm. *coma(e)zreset*.
 commodum=comad-as; *comadasogod* (accommodatio).
 [communio, Mid. Ir. *command*, W. 3. *cymun*.]
 [Med. Lat., *companionum*, *companucht*.]
 [compar, W. 3. *cynhar*.]
 comparativus=compairt, pl. -iti, gen. -ite.
 compatres=Arm. *compizrien*.
 concedere: Arm. *concedis* (consensi).
 confessio=[*coibse*], Arm. *coffes*.
 configere: *conflechteaigthi* (congre-
 endum).
 confortare=P. *comfortye*; *dyscomfortys*
 (debilitatus, turbatus).
 [consecratio, *coisecrad*; consecravit,
cusecar.]
 consilium=[*cuisil*], Arm., V. *cusul*, P.
cussyl cusyll cusill.
 consona = *conson*, gen. *consine*. [W.
cyson.]
 [conucula (Med. Lat.), *cuigel*, V. *kigel*,
 W. *cogail*.]
 conventus=W. 3. *koveint* m. (monas-
 terium, fr. couvent).
 [coquina, *cuicenn*.]
 coquus=[*coic*], W. 1. *coc* (pistor), V.
kog (coquus); coquina=W. 3. *kegin*,
 V. *keghin* (the *k* proves the borrowing,
 the true Kymric forms have *p*: V.
popei (pistrinum), *peber* (pistor), W.
 2. *popurges*, *pophurges*, f.).
 corona=[Mid. Ir., *coróin*], V. *curun*; W.
 3. *coronawc* (coronatus).
 corrigia=W. 1. *corrui*, 3. *carrei*.
 (?)corylus=coll; W. 2. *coll* (coryle-
 tum); *col emf*. = V. *col-viden* (corylus).
 craticula=W. 1. *gratell*.
 creator = V. *creator*, Arm. *crocer*
crouer; creatura=V. *croadur* (?),
 Arm. *croeadur*.—W. 1. *creaticaul*
 (genialis).
 [credulus, *credal*.]
 [crepusculum, *crepscuil*.]
 [creta, *criad*.]
 [cribrum, *ribar*.]
 crudelis=Arm. *cruel* (French, or di-
 rectly ?).
 crux=croch, V. *crois*, P. *crows*.
 crystallus [Mid. Ir., *crisda*], trans-
 formed in W. 3. *krissant* m.
 (?)cucullus (first in Martial and Juve-
 nal)=[*cochull*], V. *cugol*.—According
 to Diefenbach (n. Jahrb. f. Phil. u.
 Päd. lxxvii. p. 756); the Latin word
 had been already borrowed from the
 Celtic.
 [culcita, *colcaid*.]
 cultellus=W. 1. *cultel* ("artuum"),
celell ("culter"), 3. *cyllell*, pl. *cyl-*
leill kylleil (sica); V. *collell* ("cul-
 tellus"), *kelillic* ("artavus").
 culter=W. 1. *cultir*, [W. 3. *cwlltor*], V.
colter.
 cuprum=V. *cober*.
 [cymbalum, *cimbal*.]
 [cypressus, *cupris*.]
 daemon=gen. *demuin*, gen. pl. *demne*.
 damnare=P. *dampnye*, Arm. *daffny*;
 P. *dampnys*, Arm. *dafnet*, *daffnet*
 (damnatus).
 [debilis, *diblile*, gl. *senium*.]
 decedere=Arm. *decedy*.
 decima=W. 2. *decum*, *degum*.
 defendere=Arm. *difén*; [W. 3. *difenu*],
 V. *difennor* ("excusator").
 denarius=dinair, Arm. *diner*.
 [deprecatio, *diprecoit*.]
 descendere=W. 3. *disgynnu*, P. *dys-*
kyyna, Arm. *disquennet*.
 desiderabat=P. *deserya*.
 despectus=P. *dyspyth*, Arm. *despez*.
 diabolus=diabul, Arm. *diaoul*, P. pl.
dywlow dewlow.
 diaconus = V. *diagon*; O. Gaedh. pl.
bandechuin (diaconissae).
 dictator=dictatóir.
 [dies Jovis, *deyow*, P.]
 [dies solis, *dew sull*, P.]
 digamma=digaim.
 dignus=Arm. *din* (French or di-
 rectly ?).
 [diluvium, *diliu*.]
 discere=P. *dysky*, Arm. *disquif*; W. 2.
desko (didicerit); P. *dyskas* (doc-
 trina).
 discipulus=discipul, V. *discebel*, Arm.
desquebl, pl. P. *dyscyplys dyscyblon*,
 Arm. *disquiblion*.
 [discretus, *discreit*.]
 discus = [tesc], W. 3. *dyscyl disgyl*
 (discus, lanx). [W. 1. *discl*.]
 divinator=Arm. *diviner*.
 doctus=W. 3. *doeth* (prudens), pl. 2.
doythion (sapientes), 3. *doethon*
 (docti). Also Arm. *doetaf* (fallo) ?
 dolor=W. 3. *dolur*.
 [dominica (dies), *domnach*.]
 draco=[drac], W. 3. *dreic*, pl. *dreigeu*.
 dubitare=Arm. *douetaf*; *douet* (du-
 bius); *doetanc* (dubitantia).
 (?) durus=[*dúr*], W. 1. *dur* (dirus), 3.
dyrys (durus).
 ecclesia=dat. abl. *aeclis*, gen. *ecolso*
ecilse, etc.; W. 2. *eccluis*, 3. *egluys*,
 V. P. *eglos*, Arm. *ylis*.
 eleemosyna=almsan., acc. *almsin* (erro-

- neously given as a nominative at p. 59).
- elephantus=W. 3. *eliffeint*, V. *oliphans*.
- emendare: W. 2. *emendassant* (emendarunt).
- episcopus=*epscop*, V. *escop*, pl. W. 2. *epscip*, 3. *escyb*; archiepiscopus=W. *archescop*, Arm. *archescob*, pl. W. 3. *archescyb*.
- epistola=*epistol*.
- eremita=V. *ermit*.
- esculus: *escal-chail* (esculetum).
- (?) esox=[*iach*], W. 3. *ehawc*, V. *ehoc*; the Latin was perhaps borrowed from the Celtic).
- French. *estonner*, *étonner*=Arm. *estonaff*.
- etymologia=*ethemlag-as*.
- excommunicatus=W. 2. *yskumunetic*, according to Z. also=*eskemun*; 3. *ysgymunn* (maledictus).
- evangelium=V. *geaweil*, Arm. *auiel*?
- faba=*seib*, (cf. frenum, flagellum).
- facies, Engl. face=P. *feth fyth*.
- fagus=W. 3. *ffa*, *ffa-wyd*. [O. Ir. *fagde*, *faginus*, Z. 765.]
- [falco=V. *fallun*, Arm. *falc'houn*.]
- fallere: P. *fall* (defectus), *fyll* (deest), *fallens* (deficient, peccant), Arm. *fall* (malus), V. *guin fellel* (acetum, i. e. vinum corruptum).
- favere (faustus): V. *fodic* (felix).
- femininum=*femin*.
- fenestra=V. *fenester*. [Mid. Ir. *sinistir*.]
- fibula=W. 1. *fual*.
- figus=V. *fic-bren*; O. Gaedh. *ficuldae* (ficulus).
- fides=P. *feth fyth*, Arm. *fez feiz*.
- figura=*ind-figor* (figuratio).
- finis=W. 2. *fin*, P. *fin-weth*, Arm. *finuez*; finire=Arm. *finissaf* (Romance, finisco).
- firmamentum=[M. I. *firmamint*.], V. *firmament*.
- flagellum=*srogell*, W. 3. *ffrowyll*.
- flamma=W. 3. *fflam f.*, V. *flam*.
- [flecto, *slechtain*.]
- foeniculum=V. *fenochel*. [W. 3. *ffenigl*.]
- M. Lat. follis (cf. Diez-Wörterbuch, where, however, the perfectly analogous German *Windbeutel* is forgotten)=W. 3. *ffol*, V. *fol*, P. *fol foll*, Arm. *foll* (stultus).
- M. Lat. fontana=W. 2. *finnaun f.*, 3. *ffynnaun*; V. *funten*; P. *fynten fynteon*; Arm. *feunteun feuten*, pl. *feutenyou*.
- M. Lat. forestis foresta=W. 3. *fforest m.*, Arm. *forest*.
- forma=V. *furf*. [W. 3. *ffurf*.]
- fossa=W. 2. Arm. *fos*, *foss*.
- fragrare (with dissimilation): V. *flair* (odor), Arm. *flerius* (foetidus).
- frenum=*srian*, W. 1. *fruinn*, 2. *fruy*, 3. *ffrwy*.
- fructus=Arm. *fruez*; W. 3. *diffwyth* (sine fructu).
- fugere=W. 3. *ffo*; P. *fo* (fuga).—V. *fadic* (profugus).
- fulgur, French foudre=Arm. *foultr*.
- funis=W. 1. pl. *funiou* (vittae), 2. pl. *funenneu* (ligamenta).
- fur=V. *fur* (sollers, prudens), Arm. *fur* (sapiens).
- furca=W. 3. *fforch*.
- furnus=V. *jorn* (clibanus). [O. Ir. *surinn*.]
- fustis=W. 3. *ffust* (flagellum); *ffustawd* (pulsavit). [*suist*.]
- geminantur=*emntar*.
- gentes=*genti geinti* (m. as in French); *gentide* (gentilis); gen. f. *geintlecte* (gentilitatis) 1059.
- genitivus=*genitiu f.* [gens, pl. *geinti*; gentilis, *geintlide*.]
- gerundium=*gerind*.
- [glossa, *gluais*.]
- [gradale, Mid. Ir. *gredail*.]
- gradus=*grád n.* (gen. *gráid*), V. *grat*. γράφω: W. 2. *gref* (liber, chirographum), W. 1. *grefiat* (notarius).
- gratia=P. *gras*.
- [gratias agimus, *grazacham*.]
- gravari=P. *grevye*.
- gravis (accentus)=*grai*f.
- M. Lat. gridare (quiritare)=W. 3. *gryd* (clamor), *grydiaw* (vociferari), *griduan* (vociferatio).
- [habilis, W. 3. *abl*.]
- haeresis = acc. *innerese*; haeretici=*heritic pl.*
- [Med. Lat. *hanapus*=V. *hanaf*.]
- (Fr. haster, hâter=Arm. *hastomp*, festinemus).
- [hastula, *asdul*.]
- [historia, Mid. Ir. *sdair*.]
- [honor, *onóir*.]
- (? hora=*uar*, P. or, W. *awr*?)
- hospes=W. 3. pl. *ysp*.
- humilis=[*uma*], V. *huwel*; humilitas=(*h*)*umaldóit* (*h*)*omaldóit*, V. *huweldot*.
- [hymnus, *ymun*.]
- idolum=*idol m.*
- [idus, *id*.]
- [imago, V. *auain*.]
- (impedicare?) Fr. empêcher = Arm. *ampeig* (impedimentum).
- imperator=W. 3. *amherawdyr*, f. *amherodres*; V. *emperur*, f. *emperiz*; W. 3. *amherodraeth f.* (imperium).

- incensum (cf. Fr. encens)=V. *encois* (thus), *incoislester* (thuribulum).
 infamis=Arm. *ifam*.
 infernum=*ifurnu*, gen. *ifirnn*; W. 2. *ufern*, 3. *uffern*, P. *uffarn ufforn*.
 infinitivus=*infinit*.
 [initium, *init*, W. *ynydd*, "Shrovetide".]
 instrumentum, Mid. Ir. *instrumint*.
 [interjectio, *interiecht*.]
 interrare=Arm. *enterraf*.
 [? jejunium, *aine*.]
 iudex: *úg-súide* (tribunal).
 [jusculum=V. *iskel*.]
 iustitia=Arm. *iusticc*.
 [kalendar, *calann*.]
 laicus=[*laech*], V. *leic*, pl. W. 2. *lleycyon*.
 [W. 1. *leeces*, gl. *maritae*.]
 [latex=V. *lad*.]
 latro=V. *lader*; P. *lader ladar*, pl. *ladron laddron*; W. 3. *lleidr lleidyr*.
 [lector, *legtoir*.]
 [lectus, *lecht*.]
 legalitas=Arm. *lealtet*.
 legere=legend; *airlech* (recita), *inrolég* (num legit?) etc.
 legio: W. 3. *kaer-llion* (castra legionum).
 leo=W. 3. *llew*, V. *leu*.
 liber=*libur lebor*, V. *liuer*; pl. P. *luffrow*, Arm. *leiffriou*.
 [ligo, W. 1., pl. *liuou*.]
 lilium=V. *lilie*.
 (?) linum=*lin* (rete), K. *lin* (linum).
 liquida=*lechdach*.
 littera (not litera)=*liter*; W. 3. *llythyr-en*, V. *lither-en* (singulative).
 locus=V. *logel*.
 locus=*loc*, Arm. *lech*, W. 3. *lle* (in no case primitively related, as the O. Lat. *silocus* shows).
 [locusta=V. *legest*, W. 3. *llegest* 'lobster'.]
 longa (syllaba)=*loing*.
 (navis) longa=W. 3. *llong* f. (navis), pl. 2. *loggeu loggou*, 3. *llongeu*; W. 3. *llyghes llynghes* (classis); O. Gaedh. [*long*], *fórlongis* (navigatione), Z. 1129.
 [lorica, *lúrech*.]
 lucerna = *luacharnn*, V. *lugarn*. [W. *llygorn*.]
 lunaris=*lunáir*.
 magister=nom. pl. *magistir*, acc. pl. *magistru*; V. *maister*, P. Arm. *mester*.
 (?) major=[*máer, mór-máer*], W. 1. 2. V. *mair*, W. 3. *naer*.
 maledicis = *maldachae*; maledictio = *maldacht*; *maledic* = Arm. *millic*; *maledictus* = W. 2. *melldicetic*.
 malitia: Arm. *dimalicc*, *dualicc*.
 [malva=V. *malou*.]
 [mancus=V. *mans* (leg. *manc*?), Arm. *manc*.]
 manere: Arm. *manen* (manebam).
 [manna, *mainn*.]
 [mantellum=*matal*, V. *mantel*.]
 [manus, *man*.]
 margaritae=W. 3. *mererit*.
 martulus (martellus)=W. 1. *morthol* (seta), 3. *myrthw* (malleus).
 martyrium=*martre* f. pl. *martri*; Arm. *martir*.
 masculinum=*mascul*.
 medicus=V. *medhec*, W. 3. *medic*; W. 2. *medhecynyaet* f.=V. *medhecnaid* (medicina); W. 3. *medegyn-aethu* (mederi).
 membra=*membur*, pl.
 memoria=*mebuir*.
 mendicus: *mindechu mindchichthiu* (tenuior, properly mendicior), *mindchigitir* (emendicant).
 mensa=[*mias*], V. *muis*, W. 3. *mwys* (?) cf. Goth. *mēs*, O.H.G. *mias*.
 mensura=Arm. *musur*, (cf. W. 1. *doguomisuram*? Z. 1076).
 meretrix=*mertrech*, *meirddrech*.
 metrum: gen. *metair metir*.—W. 3. *metrut* (cogitabas).
 miles = *mil*, W. 3. *milwr*; militia *milte*.
 (?) mille=*mile* f., K. *mil* (from *milia*?).
 [millefolium, V. *minfel*.]
 ministrare: Arm. *ministren* (ministrem), V. *menistror* (pincerna).
 (minus facere Diez) Fr. *mesfaire, méfaire*: Arm. *mesfêctouryen* (malefactores).
 M. Lat. mirare: Arm. *mir* (serva), *miro* (videbit), *miret*=P. *meras* (servare, videre).
 mirus: P. *marth* (miraculum); Arm. *maruail* (mirabile)=Fr. *merveille*.
 modus=*mod* (gen. *muid*, dat. *mud*).
 (?) molina=*mulenn* (pistrinum), K. *melin*, pl. W. 3. *melineu*.
 monachus=[Old Ir. and] V. *manach*, pl. W. 2. *meneich*; f. W. 3. *manaches*, V. *manaes*.
 monasterium=gen. pl. *monistre*.
 moralis: dat. *moral-us* (praecepto).
 [morticinium, *muirtchenn*.]
 morus=V. *moyr-bren*.
 [Med. Lat. multo=*molt* V. *mols*.]
 (?) mulus=acc. pl. *milu*.
 murus=[*múr*], W. 3. *mur*, pl. *muroed*.
 muta=*mút*; mutus=W. 3. *mut*.
 myrias=W. 3. *myrd*.
 myrtus: *mirt-chail* (myrtetum).
 natalicia=W. 2. *nodolyc*, 3. *nadolic* (nativitas). [O. Ir., *notlaic*.]

- [nates, *nát.*]
 natio=Arm. *nation*.
 negotium=W. 3. *neges* f.
 neutrum=*neutor*, *neutrálde*.
 [nimbus, *nimb.*]
 nota=not pl. 1011, *nota*, 1016; *notarius*=*notaire* *notire*, Arm. *noter*.
 [novellus, W. 1. *novel.*]
 numerus=W. 1. *nimer*, W. 3. Arm. *niuer nifer*, P. *nevor*.
 (? nuptiæ: W. 3. *neithawr*?).
 obediens=Arm. *obediant*.
 [oblatio, *oblann.*]
 offerre=W. 2. *ofrum*, Arm. *oferen*, pl. *offerennou* (oblatio). [*oiffrenn.*]
 olea: *ola-chrann* (oliva), *ola-chaiill* (olivum); V. *olen-bren* (oliva),—oleum =W. 1. V. *oleu*.
 [operarius, V. *oberor.*]
 optativus=optait *optil*.
 opus [opera?]=*obar*? (*saibes inobar*, gl. inanem fallaciam Z. 1040) usually *oipred*, gen. *oipretho*; P. *ober*; Arm. *ober auber*, pl. *oberou euffrou*; P. *oberor* (operarius); V. *drochoberor* (maleficus).
 oraculum: [*airecal*], *oircelech* (flamen=oraculicus).
 [orate, *orait*, W. 1. *araut.*]
 [oratio, acc. s. *orthain.*]
 ordo=ord *ordd ort urt*, Arm. *urz*; *ordino*=*oirdninn*; Arm. *ordren* (ordinatio), *ordrenhat* (ordinare).
 [ostiarus, *oistreoir.*]
 ostreum=V. *estren*. [W. 3. *histr*, Arm. *histren.*]
 [paganus, *pagán.*]
 pagus=P. *pow*, O. Armoric (of the year 833) *pou*. [W. *pau.*]
 [pallium, *caille*, W. 3. *pall.*]
 [palma=V. W. 3. *palf.*]
 palus=W. 3. *pawl*, pl. *polyou*.
 (palus) M. Lat. *padulis* (?)=W. 2. *pull* (fossa, lacuna), V. *pol* (puteus); W. 3. *pyllawc* (lacunosus, paluster).
 [panis, *páin.*]
 papa=papa, W. 2. *pap*, pl. *papeu*.
 papilio=pupall, W. 3. *pebyll* (tentorium, Fr. pavillon).
 [papyrus, *paiper.*]
 paradisis=[*partus*], Arm. *paradis*, *paradoes*.
 parare=W. 3. *peri* (facere, jubere)?
 paries=V. *poruit* (ui=é instead of é as in the French *paroi*).
 [parochia, *pairche*, Mid. Ir. *fairche.*]
 pars=W. 1. *part parth pard* f., P. *parth*, Armoric *parz perz*. [Irish *pairt.*]
 pascha=W. 2. 3. *pasc*, O. Gaedh. acc. *caisc* f.
 [passio, *pais.*]
 patella=[W. 1. *patel.*] W. 2. *padell* f., V. *padel-hoern* ("sartago") i. e. *patella ferrea*.
 pauper=Arm. pl. *peoryen*.
 pausa (?)=W. 1. Arm. *powes* (quies), P. *powesough* (quiescite); but W. 2. *poquis-ma*, etc. (a place of rest).
 pavo=W. 3. *pawin*, V. *paun*.
 pax=Arm. *peuch*.
 peccatum=peccad m., W. 3. *pechaut*, Arm. *pechet*, pl. *pechedou*.
 pedester=W. 3. *pedestyr* (pedes). [*πέλεκυς*, W. 1. *pelechi* gl. *clavae.*]
 [pelliceus, *pellec.*]
 pensus (Romance *pêso*)=[*piss*], W. 3. *pwys*, P. *poys* (gravis, ponderosus).
 [pentecoste, *cingcidis.*]
 penultima=peneult.
 peregrinus=V. *pirgin*. [W. 3. *pererin.*]
 perfectus, Fr. *parfait*: Arm. *parfetaff* (perficere).
 [pergamium, V. *parchemin.*]
 persona=persan, W. 3. *person*.
 petere=P. *pesy*, Arm. *pidif* *pidiff*; Arm. *peden*, pl. *pedennou* (oratio precatio); P. pl. *pesadow*—appetere, =Arm. *appetaff*.
 phiala=W. 3. *ffiol*, V. *fiol*.
 philosophus=felsub; philosophia=fellsube.
 pethedie (minutus) W. 3. appears to be from the same stem as French *petit*; its *th* points back to *tt* or *ct*. [Ir. *pit*, W. *peth.*]
 [pinnaculum, *penakyll*, P.]
 pinus=V. *pin-bren*.
 piper: [*scipar.*], W. 3. *pebreid*, *pybreid* (piperosus).
 pirus=V. *per-bren*.
 [piscis=V. *pisc*, W. 3. *pysg.*]
 [piscator=V. *piscadur*, W. 3. *pysgadur.*]
 [plaga, *plag.*]
 plangere (properly *planctare*) = P. *plentye* (accusare).
 plenus=Arm. *plen* (omnino).
 plebs=O. Arm. (year 862) *ploi plue*, *plueu*; Sp. *plœ ploue*, pl. *ploueou*; V. *plui* (vicus, parochia); Arm. *plocys* (plebani).
 (?) *plicare*=W. 3. *plycca*; Arm. *pligadur* (voluntas, beneplacitum).
 pluma=[*chlúm*], V. *pluuen* (penna); W. 1. *plumauc*, V. *plufoc* (pulvinar).
 poena=pén *pián*; Arm. *poan* (angustia), pl. *poanyou*; P. *peynys* (dolores).—Arm. *penedour* (afflictione gravatus), W. 3. *penydyaw* (poenitere), O. Gaedh. *pennit* (poenitentia).

pommaille (Fr.)=Arm. *pomell*.
 pondo=W. 1. *punt* m.
 pons=W. 2. *pont*, V. *pons*.
 populus=*popul*, V. *popel*, *pobel*, P. *pobyll*.
 (?) porcellus=W. 3. *parchell*, V. *porchel*. [Ir. *orc*=*porcus*.]
 porta, portus=port m. (domus), Beitr. I. 334; W. P. *porth* m. pl. W. 3. *pyrth*, P. *porthow* (porta).
 portare=W. 3. *porthi* (perferre), *porthes*; P. *porthas* (nutrivit); Arm. 2. *porz* (quaere, adjuva), *porzit* (subvenite, sublevate); W. 3. *porthant* (provisio, nutritio), *porthmon* (hospes, caupo).
 positivus=*posit*.
 postilena=W. 1. *postoloin*.
 postus=W. 2. *post* (columna).
 praebendarius=V. *prounder*. [pl. *pronteryon* P.]
 praeceptum=*precept* f.; *praeceptor*=*preceptoir*.
 praedicco = *predchim*, *preduch*, *predag*; Arm. *prezec* (praedicare).
 praelatus=[*prelait*], Arm. *prelat*.
 praeservare: Arm. *preservo* (praeservet).
 praestare: Arm. *presüs* (praestitit).
 prandium=*proind* (prandere).
 [presbyter, *cruinther*?]
 pretiare: P. *praysys* (celebratus).
 primus=*prin*, W. 3. *prif*.
 princeps=P. *prins*, *pryns*, pl. *princis*.
 [prior, Mid. Ir., *ban-prior*.]
 prison (French): Arm. *diprisonet* (excarceratus).
 probus: *amprom* (improbis), *amprome* (improbitas), *rondpromson* (q. id probavit ipse), *promfidir* (probabitur); Arm. *proffe*, *prouffe* (probaret); P. *previs*, *prejis* (probatus).
 [prologus, *prolach*.]
 pronomen=*pronomen* n.
 [propositus, *propost*.]
 propheta=V. *profuit*, pl. P. *profusy*.
 prudens=W. 3. *prud*.
 psalmus=*salm*, pl. *sailm*, acc. *salmu*; psalterium=dat. *saltir*, Arm. *psaulter*. [psalterium, *saltair*, gen. *saltrach*.]
 [purgatorium, *purgatoir*.]
 purpura=*corcur*, W. 2. *porffor*.
 purus=[*pur*], W. 3. *pur*, *purdu*, *purgoch*, *purwynn*.
 putana (Rom.)=W. 3. *putein*.
 (?) puteus=*cute*, Beitr. I. 334 (strikingly reminds us of the Low German *kaute*, *kute*, a pit).
 [quadragesima, *corgais*, W. *grawys*.]
 [quaestio, *ceist*.]
 [quingagesima, *cingices*.]
 [rastrum, *rastal*, W. 1. *rascl*.]

recommendaré (Fr.)=Arm. *recommant*.
 ? regnare=Arm. *renaff*—but compare Arm. *roen* (rex)—?
 regula=*riagul*, *riagol*; Arm. *reol*.
 [reliquiae, *reilic*.]
 remus=*rám* (cf. Fr. *rame*), V. *ruif*.
 rendere for reddere (Rom.): Arm. *rento* (reddet).
 rete=V. *ruid*, Arm. *roed*. [W. 3. *rhwyd*.]
 rosa: *ros-chuill*, *ros-tán* (rosetum), *rostae* (rosarium).
 [ruta, V. *rute*.]
 [sabbatum, *saboit*, pl. *sapati*.]
 sacerdos=sacerd. [sacrificium, *sacorbaic*.]
 sacrilegium=Arm. *sacrileig*.
 saccus=[*sacc*], V. *sach*.
 [sacculum, *sagul*.]
 [saliva, W. *haliw*, O. Ir. *saile*.]
 [salicestrum, *sailestar*, W. *elesir*.]
 saltus=salt, gen. *salto* (astronom.).
 salutare=Arm. *saludomp* (salutemus).
 salvare. Fr. *sauver* (with the old diphthongal Norman pronunciation, see Diez. Rom. Gramm. I², 425)=P. *saw* (salva), *sawye* (salvabat), *sawye* (salvatus).
 sanctus=[*sancht*], W. Arm. *sant*, pl. W. 2. 3. *seint*, Arm. *sent*.
 [Med. Lat., *sappetus*, V. *sibuit*.]
 scabellum=V. *scauel*.
 scala=W. 3. *yscawl*, pl. *ysgolygon*.
 (?) scandere=W. 3. *yscynnu*; W. 2. *eskenho*, *eskynho* (scanderit).
 schola=[*scol*, gen. *scule*], V. *scol*; V. *scolheic*=W. 3. *yscolheic* (scholasticus), pl. W. 2. *escolejcyon*, pl. *yscolejgyon*; W. 2. *escolectaut* (status scholaris).
 sciens: V. *skientoc*; P. *skentyll*, *skyntyll* (sapiens); Arm. *squient* (spiritus, intelligentia); V. *diskient* (insipiens), *guan ascient* ("energuminus").
 scribere=scribend; V. *scriuit*, *scriuen* (scriptura), *scriiniat* (scriptor); P. *screfe* (scribere).
 scrinium=scriu m.
 scripulus=W. 1. *scribl*; O. Gaedh. *lethscripul* (dimidio scripulo).
 scutella=V. *scudel*, P. *scudell* (discus, lanx).
 [sēbum, V. *suif*, W. 3. *swyf*, Arm. *soav*.]
 securus=P. *sur*.
 senator=senatōir.
 [senior, *seinser*.]
 sensus=sens, dat. pl. *siansib*.
 sepelire=Arm. *sebeliaf*. [sepultura, *sabaltair*.]
 (? septimana = *sechtmaine*). [V. *seithum*.]

- [septuaginta, *septien*.]
 sermonarius=Arm. *sarmoner*.
 [serus, W. *hwyr*.]
 sextarius=W. 1. *hestaur*, pl. *hestoriou*, 3. *hestawr* f., (the *h* in the loan word is remarkable).
 [Med. Lat. *sicera*, V. *sicer*.]
 signum=[*sén*], Arm. *sin*.
 [situla, [Mid. Ir. *siheal*.]
 solarium=[Mid. Ir. *soiler*,] V. *soler*.
 solitarius=Arm. *soliter*.
 [Med. Lat. *solta*, V. *sols*, W. *swllt*, Fr. *sou*.]
 (somnia) Fr. *songer*=Arm. *soingaf* (credo).
 [sophista, Mid. Ir. *soifist*.]
 (sors) Fr. *sorte*=Arm. *sceurt*, i.e. *sört* (modus).
 soutenir (Fr.)=Arm. *soutenct* (sustentatus).
 spatium=W. 3. *yspeit*.
 sperare: Arm. *esper* (spes).
 [spina, Mid. Ir. *spin*.]
 [spiraculum, *spíracul*.]
 spiritus=spirut, V. *spirit*, Arm. *speret*.
 spoliare=W. 3. *yspeilaw*; *dispeilaw* (denudare, gladium).
 [spongia, *sponge*.]
 [sponsa, Mid. Ir. *pústa*, W. *pwys*, *yspwys*.]
 stabulum=[W. 1. *stebill*, pl.], W. 3. *ystabyll*.—W. *steuel*, W. 2. *estauell*, 3. *ystauell* f. (triclinium, cubiculum) appears to belong also to this place; but compare also Fr. *estaminet*.
 stagnum=stán.
 [stannum, Mid. Ir. *stanamhail*.]
 status=Arm. *stat*.
 standardo (Romance), W. 3. *ystondard* f.
 stimulus=W. 1. *sumpl*.
 stola=V. *stol*.
 stragulum=V. *strail* (tapeta), *strail elester* (matta).
 strata=W. 2. *strat* *ístrat*, 3. *ystrat* (vallis aperta, planities).
 stratura (M. Lat.)=[*srathar*], W. 1. *strotur*. (stravi=W. 1. *strouis*?).
 strigilis=V. *streil*.
 superlativus=superlaid *superlüt*, pl. *superluti*.
 syllaba=sillab.
 synodus=[Mid. Ir. *senadh*], V. *scned*.
 tabellarius=tablaire.
 [taberna, Mid. Ir. *taibherne*.]
 [tabes, *tám*.]
 talentum=talland (facultas, ingenium, Fr. talent).
 tardare=Arm. *tardomp* (tardemus), *tardet* (tardate).
 [tellus, *telluir*, gen. *tellrach*.]
 tempero=W. 1. *temperam* (condio).
 templum=tempul, Arm. P. *tempel*. [W. 3. *templ*.]
 temptare=P. *temptye*.
 (?) tendere=W. 3. *tyanu*; Arm. *emtennet* (se recipere), *teniff* (pergam); P. *tensons* (tetenderunt).
 terminus=P. *termyn* (terminus, tempus).
 [tertia (hora), *teirt*.]
 testis=test, V. *tist*, Arm. *test*, pl. W. 2. *testion*; testimonium=testimin, V. *tistuin*, P. *tustunny*; W. 2. *testu* (testari).
 [theca, *tiach*.]
 [theoria, *teor*.]
 [thesis, *teis*.]
 thronus=Arm. *tron*.
 thus: *tus-lestar* (tribulum).
 [Titan, Mid. Ir. *títal*.]
 titulus=titul *titol*, acc. pl. *titlu*.
 [Fr. *tonneau*, V. *tonncl*.]
 torneamentum (M. Lat.)=W. 3. *turneimeint*.
 torques=muin-torc, W. 3. *torch*.
 torta=[*tort*], W. 1. 3. *torth* (panis).
 tractus=[*tracht*], W. 3. *tracht* (sabulum maris), V. *trait* (arena).
 [totus, *tot-mael* gl. Totus Calvus].
 traditio (Fr. trahison)=P. *treason*.
 tribunus=trebun-suide (tribunal).
 trinitas=trundóit, [W. 1. *trintaut*], Arm. *trindet*.
 [tripus, W. 3. *tribedd*, V. *tribet*.]
 tristis: [W. 1. *trist*, P. *trest*], W. 3. *tristit* *tristyt* *tristwech* (tristitia), *tristau* (tristem esse).
 tructa=V. *trud*.
 [truncus, W. 3. *truch*, V. *trech*.]
 (?) tuba=gen. *tuib*.
 [tunica, *tuinech*.]
 (?) turba=W. 3. *twryf* *tworwf*.
 turris=[*tuir*], W. *twr*. m., pl. 3. *tyreu*, *tyroed*, V. *tur*.
 [tympanum, *timpan*.]
 ultima=ult, acc. *uult*.
 uncia=ungae unga (see above: atomum).
 unguere, unctare=P. *untye*.
 [unicornis V. *uncorn*.]
 ursus=V. *ors*.
 (?) vagina=[*faigen*], W. 3. *gwain*, V. *gwein*, P. *goyn*.
 velum=fial (velamen), [V. *guil*.]
 venenum=W. 3. *gwenncyn*; *gwenwynic* (venenosus), V. *gucnoureiat* (veneficus).
 [versatile? Mid. Ir. *fersaid*, W. 3. *gwerthyd*.]
 versus=fers, gen. *fersa ferso*.
 ? verus=fir, V. Arm. *guir*, W. 3. *gwir*, P. *gwyrr*.-?

vetus: *fetar-laice fetarlice fetarlice*
(*vetustas*).
[? *vidua* = *fedb*, V. *guedeu*, W. 3.
gweddw.]
[*vigil*, *figil.*]
villani = W. 2. pl. *byleynyeyt*.
[*vinea*, *fine.*]
vinum = *fin* *finn*, K. *guin*.

viperæ = W. 3. pl. *gwiberot*.
virtus = P. *vertu*; O. Gaedh. gen. *ferto*
ferte, nom. pl. *ferte*, acc. *firtu* (*virtus*,
prodigium).
[*visio*, *fis.*]
vitium = Arm. *vicc*, (Fr. *vice*).
[*vocula*, *focul.*]

To these are to be added a number of French words in the Armoric. Even from this list, which would, of course, be greatly enlarged if we were to include the more modern words, and in which, no doubt, many old loan-words are certainly only accidentally wanting, we can see what numerous borrowings took place already in ancient times, from the Latin, Middle Latin, and Romance. And even though the borrowing be doubtful in the case of some words (certainly not many), nevertheless the majority of the apparently exclusive correspondences of Celtic and Latin have been thereby removed.

The Latin has taken other words from the Gaulish, partly already in the classical period; and later also from the British (as *corvinus*); in any case, however, their number is not very great; in regard to some of them there exist, too, doubts, which at present we are unable to solve. Those are especially important, which, although taken at a late period, have nevertheless passed into the Romance languages (as *vertragus* = It., *veltro*, etc., from this again V. *guilter*, *molossus*); but for our present object we may here fitly pass over these.

§. 2. Glossarial affinities of the Celtic and Classic languages.

The Celtic has about the following words and roots, in common exclusively with one or both of the classical languages (or at all events, with such peculiarities of form or meaning as only recur in them).

WORDS AND ROOTS EXCLUSIVELY COMMON TO THE CELTIC AND CLASSIC LANGUAGES.

aér áiar m., W. 3. *awyr* = *ἀήρ*, *aura* (or derived from *aēr* perhaps itself borrowed?)
ag (root): *atomaig* (impellit me) = Lat. *adigit*; — *āγω*, *ago*.
ailigim (muto) = *ἀλλάσσω*.
**ainm*, W. 3. *enw*, P. (*h*)*anow*, Arm. *hanu* = *ὄνομα* (in the form).
[*alt* = Lat. *artus*.]
W. 3. *alarch* m., V. *elerhc* = Lat. *olor*?
anim, V. Arm. *enef* = Lat. *anima* (Zeitschr. VI. 213).
[*arba* (read *arva*), W. 3. *erw*, V. *erv*, *ereu* = Lat. *arvum*.]

ardd = Lat. *arduus* (Gr. *ὀρθός* appears to have been *φορθός*), not a loan-word as the Gaulish *Arduenna* ("heights", *Cebenna* "ridges") shows.
as (*a*, *es*) = *ἔξ*, *ex*.
V. *auhel*, Arm. *anel* (*aura*), W. 3. *awel* (*flatus*). — V. *anauhel* (*procella*), = *ἄελλα*?
V. W. 3. *auon* f. (*flumen*), pl. W. 3. *anonyd* = Lat. *amnis*?
[*ball* = *φαλλός*.]
V. *ber*, W. 3. *berew* (*veru*) — O. Gaedh. *berach*, *birdae* ("verutus") = Lat. *veru* (Umbr. *berva*, *berus*?).

- ? *bethe* ("buxus"), [W. *bedeu*], V. *bedeven* ("populus") = *betula betulla*? (according to Pliny, Gaulish).
- **bou*; O. Gaedh. *bóchaill*, V. *bugel* (bubulcus, pastor), W. 1. *boutig* (stabilum); also W. 1 and 2. V. *buch* (vacca)? = *βοῦς*, *bos* (in the form; the other languages preserve the guttural).
- V. Arm. *brech*, W. 3. *breich* = *brachium*, *βραχίον*.
- [*buide* 'yellow' = *badius*, Fr. *bai bay*.]
- can* (root): W. 3. *kanu*, P. *cane* (*canere*), W. 3. *datkanu* (*recitare*, *revelare*), O. Gaedh. *forchanim forchanim* (*praecipio*), *foirthe* (*eruditus*), *forctial forcetal* (*doctrina*), *forcül(a)id* (*forctilid* (*praeceptor*), *terctial* (*vaticinium*), *doaurchanaim* (*sagio*), *céllaid* (*cantor*), also *cél* (*augurium*)⁸⁴ and gen. *ciuil* (*instrumenti musici*)?; —V. *cheniat* (*cantor*), *canores* (*cantrix*), —Lat. *cano*.
- W. *cann*, V. *can* (*albus*) = Lat. *candidus* (cf. the loan-words under *candela*).
- car* (root) (widely ramified in both languages, no doubt also the source of the, so far as I know, exclusively French form *chérir*) — Lat. *carus*?
- W. 3. *karw*, V. *caruu* = Lat. *cervus* (if it be not borrowed? — the O.H.G. *hiruz* shows another suffix).
- cathir* (*civitas*), K. *cair caer* (*oppidum*) = Lat. *castrum*?⁸⁵ (compare as to the phonetic relations *sethar siur*, W. 3. *chwior* = Goth. *svistar*).
- claideb*, W. 2. *clidif*, W. 3. *cledyf*, Arm. *clezef*, P. *clethe* (*fundamental form* **cladibas*) = Lat. *gladius*.
- clói*, W. 2. *cloeu* pl. = Lat. *clavi*. [a loan-word?]
- cnám* (os) = *κνήμη*?
- corp*, K. *corp* = Lat. *corpus*. [a loan-word?]
- cos* (pes) = Lat. *coxa*? [*costa*?]
- cretim* (rel. *cretas crettes creites*, pl. *cretite*), W. 3. *cret* (*fides*), Arm. *cridif* = Lat. *credo*, (see Stokes Beitr. I. 458). [loan word.]
- [*cruitr* W. 1. V.], V. *croider* (perhaps also O. Gaedh. *criathar*, gl. *cerebrum*?) = Lat. *cribrum*.
- W. 3. *cwydaw*, P. *cothe* = Lat. *cadere*? (in the form rather = *cedere*).
- cúl* (*tergum*) = Lat. *culus*.
- di*, W. 1. Arm. *di*, P. *the*, W. 3. *y* = Lat. *de*.
- du-* (*do-*) = *δύς*-, Skr. *du-*.
- [W. 3. *ffer* = *σφόδρόν*.]
- [*fi* = Lat. *virus*, *ióc*, Skr. *visha*.]
- V. *gurah*, W. 3. *gwrach* (*anus*) — *γραῦς*? [*ibim*, Lat. *bibo*, Vedic *pihámi*.]
- iuis* gen. *mse*, W. 2. *mis*, 3. *ynys* f., Arm. *enes* = Lat. *insula*? (if perhaps this be a diminutive formation, not as Pott would make it = *εἰναλος*).
- itir etir etar*, P. *intre yntre*, Arm. *entre* (*foreign to the Welsh*) = Lat. *inter*. [Skr. *antar*.]
- ith* gen. *etha* (*frumentum*), V. *yd* (*seges*); Lat. *ador* (interchange between *d* and *t* in *ithim* likewise).
- V. *yorch* (*caprea*) = *ζόρξ*, *δόρξ*?
- W. 3. *keissaw* (instead of **kessiaw*, **kassiau*) scarcely = Lat. *quaerere*? (Gaulish *λαγκία* Diod. Sic. V. 30. probably an erroneous supposition, otherwise = *lancea*, *λόγχη*).
- [*lacht*, W. 3. *luit* (*lac*), W. 1. *laiðver* ("lacocula"), W. 2. *laethauc* (*lac praebens*) = Lat. *lac*.
- **léic* (*sine*), *léicci* (*sinit*); general, but in the form exactly = *linguit*.
- liac*, W. 3. *llech* f.; *lapis*, *λίθος*, *λάιγξ*?
- lobur* [W. *lhwfr*] (*infirmus*); Lat. *labor*, *labo*, *labes*?
- loth* gen. *loithe* (*palus*, *coenum*), W. 3. *lhudedic* (*coenosus*); Gaul. *Luteva*, *Lutetia* — Lat. *lutum*.
- maim*, V. *metin*, W. 3. *yr meitin* (*mane*) — Lat. *matutinus* (borrowed?).
- [*mil*], V. *mel* = *mel*, *μέλι*.
- midur-sa* (*puto*), W. 3. *medwl medol* (*cogitatio*), *medylyaw* (*cogitare*) — *μέδομαι*, *meditor*.
- W. 3. *mynyd*, V. *menit*, P. *meneth* = Lat. *mons*; *emineo*?
- naue* (gen.), *noe* = *navis*, *ναῦς*. [Skr. *náv*, *náu*.]
- nezaff* Arm. (*z* = *dh*) = *νήθειν*, *νέειν*, *nere*? *neri*, K. *nerth* (*virtus*); *νήρη*, Osc. *Umbr. ner*, Sab. Lat. *nerio*, *Nero*.
- W. 2. 3. *oet*. (*aetas*), 3. *hoedel hoedyd* (*vita*), *oetawc oedawc* (*aetate provectus*) = Lat. *aetas*? (*v* could have dropped out as well in Celtic as in Latin, but compare also the still unexplained *ni*, *oe* in the verbal substantives).
- [*saiget*], W. 3. *saeth*, P. *seth* = Lat. *sagitta* [borrowed?]

⁸⁴ [Compare with this rather Old Norse *heill*, *omen*.]

⁸⁵ [*Castrum* is probably for *cad-trum*, and cannot be connected with *cathair*, gen. *cathrach* = an Old Celtic **cotarax*, cfr. *cataracton*.]

sái=Lat. *sagum*.

**saillim*=ἄλλομαι, *salio* (Goth. *salta* a different form).

samail samal (similitudo)=**samali*; *amail amal* (=dat. loc. **samali*) W. 2. *mal*, P. *avel*, Arm. *euel* (ut); *cos-mail cosmuil cosnül* (=**consamali*), W. 3. *kyffelyp kyffelyb* (consimilis)—Lat. *similis*.

W. 3. *sarff*=Skr. *sarpa*, Lat. *serpens* (ἐρπετόν).

sciath (O. Arm. *scoit*-, *scoet*-)=Lat. *scutum*? (the vowel is different).

sech (praeter, extra, supra), K. *hep heb* (sine)=*secus*, ἐκάς.

W. 2. *helic*, V. *heligen*=Lat. *salix*.

su- [W. *he*-]=Skr. *su*-, Gr. *εὔ*.

tar, W. 2. *trus*, 3. *dros*, P. *dris drys* (Arm. *dreist*)=Lat. *trans*, Umbr. *tráf*. W. 1. *tarater*, 2. *taradyr*=τέρετρον, *terebra*.

tarvos (Gaulish), O. Gaedh. *tarb*, W. 2. *taru*, P. *tarow*=*taurus*, ταῦρος (consequently to be separated from Slav. *turū*, O. Norse *bior*, Goth. *stiur*).

tir, K. *tir* (terra) nearest affinity=Osc. *teerūm* (possibly Lat. *terra*).

[*uan*, W. 3. *oen*, V. *oin*=*agnus*, for *avignus*, "ewe-born"?]

úrde, W. 3. *gwyrd*, V. *guirt*=Lat. *viridis*.

fáith=Lat. *vates* (borrowed?).

§. 3. Glossarial affinities of the Celtic, Classic, Teutonic, and Lito-Slavonian languages.

Others may no doubt be placed side by side with Latin ones, but are not the less Teutonic, Slavonian, and Lithuanian. The following occur more or less generally, for instance:—

WORDS AND ROOTS COMMON TO THE CELTIC AND CLASSIC LANGUAGES, BUT ALSO FOUND IN THE TEUTONIC, SLAVONIAN, AND LITHUANIAN.

accus oculus (vicinus), *comacus* (vicinus), *comaicsiu* f. (vicinia), W. 3. *agos*, P. *ogas* (vicinus), W. 2. *kauacus*, 3. *kyfagos* (propinquitās, vicinitas), V. *carogos* (affinis, consanguineus)—first in the Greek ἐγγύς, ἄγγι, but also Lat. *angustus*, O.H.G. *angi*; Slav. *aža jaza*, *ažū vazū* (vinculum), Lith. *anksztas anksztā* (X.H.G. *enge*). The conjunction *acus oculus oculis* (et) appears to be a dat. loc., as it has the power of aspiring. From the same root comes *octe ochte* (necessitudo), compare Lat. *angor*, *angustia*, Slav. *jęza* (morbus). Interchange between *cc* and *ng* occurs elsewhere likewise, e. g. in *cumacc*, *cumang*, *cumacht*.

ailē, K. *all*=*alius*, ἄλλος, Goth. *alis alja* (O.H.G. *ali*- in some few words, among which may be mentioned *elithiotic*, as was already observed by Graff=W. 2. *alldut*, pl. *alltudion*; in this form (with *l*) it is wanting in the Slav. and Lith.

ainm (see supra)=Goth. *namō*, Slav. *ime*, Prussian *emnes*.

ais ois, Gen. *aisa aisso*, *oissa oesa* (aetas), W. 1. *ois* (seculum), 3. *oes* (vita). V. *huis* (seculum), P. *oys* (aetas); nearest affinity=Skr. *āyus*, but then also *aiōn*, *aevum*, Goth. *aiēs*, O.H.G. *ēwa*; is wanting in the Slav. and Lith.

ar (root) (arare); general in all European languages.

athir (K. *tat*, like Gr. τέτρα)=*pater*, πατήρ, Goth. *fadar*; is wanting in the Slav. and Lith., which again differ from each other.

ben, *ban* (mulier), V. *benen* (sponsa), *benenrid* (femina), *benenuat* (matrona), P. *benyn* (mulier), pl. *benynas*=γυνή, Bæot. βίνα, Slav. *žena*, Goth. *qvēns qvinō*, O.H.G. *chona*; is wanting in the Latin and Lithuanian (however there is Prus. **gamma*).

bar, *ber* (root), (ferre) general.

bráthair bráthir, W. 1. *braut*, 3. *brawt* pl. *brodyr*, V. *braud* *broder*, Arm. pl. *breuder*=*frater*, φροτήρ (Zeitschr. VII. 436), Goth. *brōþar*, Slav. *bratrū* *bratŭ*, Lith. *brólis*.

bou (see supra)=O.H.G. *chuo*, Slav. *govědo*, Lettish *gōws*.

biu beo (vividus), *bethu beothu* (vita), *beod* (vividus), *biad* (victus, esca), *beoigidū* (vivificat); W. 3. *byw*, Arm. *beo*, P. *beu* (vividus), V. *biu* (vita), W. 3. *bywynt* m., Arm. *buez buhez*, P. *bewnas bewnans* (vita), Arm. *beuaf* (vivam), P. *bewe* (vivere); *vividus*, βίος, Goth. *qv-us*, Lith. *gyvas*, Slav. *živŭ*, etc.

cride n. =καρδία, cor, Goth. *hairto*, Lith. *szirdis*, Slav. *srŭdice*.

camn (curvus, obliquus), dat. pl. *cam-maib*, *cammderc* (strabo), *camthuisil*

(casus obliqui), W. 2. 3. Arm. V. *cam.* (curvus), V. *camhinsic* (injustus), Gaul. *Camba*, *Cambodunum*, Μορικάμβη; Gr. κάμπω, Lith. *kàmpas* a corner, *kūmpas* crooked.

[*cnu*, Lat. *nux* for *cnux*, *hnot*, Eng. *nut*.]

crum f., V. *prif*, W. 3. *pryf* (vermis)=*vermis*, Goth. *vaurns*, Lith. (*kirmis*), *kirmėlė*, *kirminas*, Slav. *czrŭvĩ*, *czrŭvĩ* (but *czrŭmĩnũ*),—Gr. ἔλμυς?).

cú; K. *ci*=κύνων, *canis*, Goth. *hunds*, Lith. *szũ* (Slav. *suka*, *sobaka*).

W. 3. *cudyaw* (abscondere, celare), P. *cuthe*, Arm. *cuzet* (occultare)=κεῦθω, further Lat. *cutis*, O.H.G. *hút* f., *hutla* f.

W. 3. *keffyl* (equus vilis)=Lat. *caballus* (καβάλλης probably borrowed), Slav. *kobyła*, *kobylica*, *konĩ*, Lith. *kunėlė*, *kumelukas*, (*kũnas*, probably borrowed).

[*dér*], W. 1. *dacr-lon* (uvidus), pl. W. 3. *dagreu*, P. *dagrow* (lacrimae)=δάκρυ, *lacr-ina*, Goth. *tagr*, Lith. *aszarà*; is wanting in Slav.

daur (quercus), *daurauch* (quercetum), *daurde* *daurde* (quernus), *derucc* (glans), W. 3. V. *dar*, pl. *deri*, Sg. W. 3. *derwen*⁸⁶ (quercus); δόρυ, δρῦς, Goth. *triu*, Slav. *drěvo* (arbor), *drŭva* (ligna), Lith. *derva*; is wanting in the Latin. [? Dr. Siegfried compares *laurus* from *daurus*, as *lingua* from *diqua*, *lacrima* from *dacrima*, etc.]

dam (root) (in the Celtic, with a peculiar application of meaning): *fodaimin-se* (patior, tolero), W. 1. *quodeim-isau* (sustulisti), P. *gotheff* *gothevell*, Arm. *gouza* *gouza* (tolerare)=*domo*, δαμάζω, Goth. *timan*, *tanjan*.

dét, K. *dunt* m. (V. *dans*, pl. W. 3. *danned*)=*dens*, δένους, Goth. *tunpus*, O. Norse *tönn*, O.H.G. *zand* *zan*, Lith. *dantis*; is wanting in Slav.

dess, W. 2. *dehou*, 3. *deheu*, P. *dyghow*=δεξιός, *dexter*, Goth. *taihsvs*, Slav. *desinũ*; Lith. *deszinė* (dextra).

dia (dies), W. 2. *diu dihu*, 3. *dyw* along with *dyd*, V. *dei*, P. *dyth deth*, pl. *dethiow*, Arm. *deiz*, pl. *diziou*=Lat. *dies*, Slav. *dĩnĩ*, Lith. *dėnũ*; it is wanting with this meaning in German and Greek.

dia (deus), W. 2. *diu dyu dyu dyhu duhu duo*, 3. *dur*, V. *dug*, Arm. *doe*—W. 2. *dynuau* (divinus)=*deus*, θεός (?), Lith. *dėvas*, Lettish *dēws*;

is wanting in German and Slavonian. [But cf. O.N. *tívar* "gods".]

dorus, W. 1. [*drus*], *dor*, pl. 3. *doreu*, W. 3. *drws*, V. *darat*=θύρα, *fores*, Goth. *daur* *daurō*, Lith. *dūrys*, pl. Slav. *dvřĩ*.

ech, K. *ep*=*equus*, ἵππος, O. Sax. *ehu*, O. Norse. *iór*; Lith. *aszva* (equa); is wanting in Slavonian.

W. 3. V. Arm. *elin*, (ulna)=Goth. *aleina*, ὀλένη, Lat. *ulna*; in the Lith. Slav. there is another suffix, where it is not wholly different.

gaim-red, W. 1. *gaem*, 2. 3. *gayaf*, V. *goyf*, Arm. *goua*ff—W. 3. *kynnhaeaf*, V. *kynia* (auctumnus, i.e. forewinter)=*hiems*, χιών χειμών, Lith. *žėmà*, Slav. *zima*; is wanting in German.

1, *gen* (root Skr. *jan*)—in *gigno* (*gnas-cor*, γίγνομαι, γεννάω, Goth. *kunī*, N.H.G. *kind*, Slav. *žentĩ* (*gener*), Lith. *ginti*; appears in Celtic partly with *g*: *nogigned* (*nascebatur*), *rogen* (*a*)*ur* (*natus est*), *dogentar* *gentur* *genthir* (*fiet*), *doguū* (*facio*), *fognĩ* (*servit*), *gnĩm* (*factum*), *fognām* (*servitus*), *congnam* (*contributio*), *gnethid* (*operarius*), *gein* (*ortus*) Z. 466, *gen*. *geine* Z. 1043, *geinudae* (*genitalis*), W. 3. Arm. *gunet*, P. *genys* (*natus*), W. 2. *guncyr* (*fit*), 3. *gunaf* (*facio*, *faciam*)=P. *gnera*ff, *graf*, Arm. *groa*ff *graf* *gruif* *griff*, etc.; partly with *c*: *cenel* (*natio*, *gens*, *genus*), *cenelae* (*genus*), *cenelach* (*generalis*), *cenaelugud* (*generatio*)=W. 1. *cenitol* (*generatio*), *cenitolaidou* (*natales*), 2. *kenedel*, 3. *kenedl* *kenedyl* (*genus*), V. *kinethel* (*generatio*)=γενεθλον.

2 *gen*. (root—Skr. *gnā*)—in *gignōsko*, (*gnosco*, Goth. *kan*, Lith. *žinũ*, Slav. *znaja*; O. Gaedh. *adgēn-sa* *adgeuĩn* (*cognosco*), *etargeiuĩn* (*noscit*), *gnē* (*ratio*), *aũhgne* (*sapiens*, n. *cognitio*), *irgnae*, *etargne*, *etarene* (*cognitio*), *itargniũm* (*sapio prudentia*), *nom-etarguĩgedar* (*me commemorat*).

ithim (*mando*), *estar* (*edit*), W. 3. *ryt yssu* (*comesum esse*); the primitive *d* in W. 2. *keueduc* (*comessatio*, *epulae*); the root *ad* is general. (The derivational *ith* (*puls*), W. 1. *iot* "pulsum" appears to correspond to the Greek εἶπα).

W. 3. *ienanc*, pl. *ieueinc*, V. *iouene* *jouone*, P. *younk*, sup. W. 2.3. *ieuhuf*; O. Gaedh. *ócluchdĩ* (*juvenilia*),

⁸⁶ Erroneously explained in Zeitschr. VII. 211;—*en* is singulativ.

- ócmil* (tiro) = *juvenis* (juvencus), Goth. *juggs* compar. *juhiza*, Lith. *jáunas*, Slav. *junŭ* (Servian *junak* hero), (Gr. ἡβη?).
- W. 1. *iou*, V. *ieu* = *jugum*, *ζυγός*, Goth. *juk*, Slav. *igo* (i. e. *jigo* instead of *jugo*), Lith. *jungas*.
- lagau* (parvitas), *laigiu lugu* (minor), *luginem* (minimam), W. 3. *llel* (minor) — *ελάσσων*; Lat. *levis*, Slav. *ligŭkŭ*, Lith. *lengvas*, Goth. *leihts*.
- lân*, W. 3. *llawn*, P. Arm. *len leun* (plenus), O. Gaedh. *lâne láine* (impletio), *lanmair* (impleti), *linmaire* (plenitudo) = *plenus*, Slav. *plŭnŭ*, Lith. *pilnas*, Goth. *fulls* (i. e. *fulus*), the Greek has only the root, not the same derivatives; Goth. (*fulljan*) and Celtic have verbs derived from it: W. 3. *llaww* (implere), O. Gaedh. *forlân* (abundavit), *rolŭn* (implevit), *comalnadar* (implet), *linad* (explere).
- il*, compar. *lia*, etc. See Beitr., I. 340.
- leth led* (latus, dimidium), = *latus*, *πλάτος*, O.H.G. *blat plat*.
- lethan*, W. 1. *litan* (latus) — *πλατύς*, Lith. *platus*, Goth. *braids*.⁸⁷
- ligim* (lingo) — *λείχω*, *lingo*, Goth. *laigô*, Lith. *laižau*, Slav. *lŭzŭ*.
- malg* (root); Mod. Irish *meilg* milk, old gloss *do omalgg mulxi*, Z. 71; everywhere.
- mau* (root): *rommunus rommŭnus* (scio, didici), *domuinur-sa domoiniur doménar-sa* (puto, spero), *admuinur* (volo), *ni cuman lim* (nescio) and many derivatives; W. 2. *menoent* (voluerint), 3. *mynych mynych* (vis, voles), *mynuir* (placet), P. *myyny* (vis), Arm. *menaf mennaf minij* (volo, posco, cogito), W. 3. *gofyn*, P. *govynny* (interrogare); *memini*, *μέμνηα*, Goth. *man*, Slav. *pameti* (memoria) &c.
- mar* (root): *marb* (mortuus), W. 2. Arm. *maru* (mori); general (German and Greek only in derivatives).
- máthir*, suppressed in Kymric by the endearing word *mam* (= *mamma), preserved however in V. *modereb*, W. 1. pl. *modrepd* (matertera), = *mater*, *μήτηρ*, O.H.G. *muotar*, Slav. *mati*; Lith. *motė* (mulier).
- medón*, W. 2. *meun*, 3. *mywn* (medius, medium): cognate words everywhere even though nowhere with this suffix.
- melim* (molo), *damil-si* (edis), general (Gr. *μόλη* along with *άλέω*).
- mí* (Beitr. I. 461), [*mistae menstruus*], W. 2. *mis*, 3. *mys*, V. *mis* = *μήν*, Ion. *μείς*, *menstis*, Lith. *mėnũ* (instead of *mėnes*), Slav. *měsęcĩ*; deviating somewhat Goth. *mēna* (luna), *mēnōps* (mensis).
- muir*, K. *mor* (mare); general (Gr. *πλημυρίς*).
- masc* (root—otherwise *misc*): *cummasc* gen. *cummisc* (commutatio), *commes-catar* (miscentur), V. *commisc*, W. 3. *cynysc* (mixtio), P. *kemeskis*, *kemyskis* (commixtio), Arm. *kemmeski* (misceo); O. Gaedh. *cumsciget* (mutant), *rochumscigther* (immutatum est), *nicumscaichthi* (non mutandum est), do not appear to belong to this root, because of *conosciget* (mutant), *conroscaigissiu* (summevisti), *conoscaige-siu* (admoveto); *misceo*, *μίσγω*, Lith. *maiszyti*, Slav. *měsiti*, O.H.G. *miscjan*.
- in níulu* (in nubibus) = *νεφέλη*, *nebula*, O.H.G. *nibul*; Slav. Lith. another suffix, and partly another signification.
- noct*; O. Gaedh. *innoc(h)t* (hac nocte), [W. 1. *henoid*], K. *nos* (nox); general.
- nú*, [recte *nua*] *nue nuae*, *núide* (novus, novicius); general in forms which partly correspond to the Skr. *nava*, and partly *navya*.
- V. *oin* = Lat. *agnus*, Ch. Slav. *agnica*, *agnŭci jagŭci*, *agne jagne*.
- óin óen*, K. *in* = Lat. *unus* (O. Lat. *oenos*), Goth. *ains*, Lith. *vėnas*, Lett. *wėns*. [Prus. *ains*.]
- V. *palf* = *palma*, *παλάμη*, Ang. Sax. O.H.G. *folma*.
- W. 3. V. *rud* (*ruber*); general.
- roth* = Lat. *rota*, O.H.G. *rad*, Lith. *rátas*.
- salann*, V. *haloin halein* (sal) = *sal*, *ἄλς*, Slav. *solĩ*; Goth. *salt*.
- [*suan*], W. 3. V. Arm. *hun* = *somnus*, *ὑπνος*, Slav. *sŭnũ* (Lith. *sápnas*, Lett. *sápnis* a dream), O. Norse *svefn*.
- sruth* (rivus, fluvius, torrens), W. 2. *frut f.*, 3. *frwt.*, V. *frot* = Skr. *srótas*; Gr. *ῥέω* (σρέφω), Slav. *struja struga*, O.H.G. *strom*, Thracian *Στρώμων*, Lith. *sraũmė*.
- V. *heeger* (socrus), *hviGERen* (socer) = *ἐκυρός ἐκυρά*, *socer socrus*, Slav. *svekrũ*, *svekrý svekrũvĩ*, Goth. *svaihra*, *svaihró*.
- W. 3. *sych* = *siccus* (O.H.G. *biseh*, *bisihan* Graff VI, 133?), Gr. *συνκός*

⁸⁷ [Much nearer is Old Norse *flatr* = English *flat*.]

- (*σανχυμός, σανσαρός*, but also *αὐχυμός, αὐχυηρός*), Lith. *sausas*, Ch. Slav. *suchŭ*.
- sethar siur* (also *siar, fiar* according to Stokes), W. 3. *chwior*, pl. *chwaer chwioryd*, V. *piur* [rectè *huir*] = Goth. *svistar*, Slav. *sestra*, Lith. *sesŭ*, Lat. *soror*; it is wanting in Greek, unless perhaps *ἑταρος ἑταιρος* belongs to it.
- 1 *sak* (root—to follow): *sechem* (sequi), *saigim* (adeo), *doseich* (persequitur), *saichdetu* (consecutio), *sechintid* (secutor) = *sequor*, *ἑπομαι*, Goth. *sakan*, *sókjan*, Lith. *sekŭ*.
- 2 *sak* (root—to say): *saigid* (loqui, disputare), *saiged* (dicit), *dosaig* (dicit), *saiges* (g. dicit), *insce* (sermo), W. 3. *heb* (inquit) = *insece*, *ἔννεπε*, Lith. *sakaŭ*, O.H.G. *sagēn*.
- sad* (root—to sit): *insādaim* (jacio), *dorósat*, *doforsat* (condidit, constituit), *adsaitis* (residebant), *sosad* *sossad* (turris, positio), *suide* (sessio), *suidiguth* *suidigud* (positio); W. 3. *gor-sed-ua* (sedes sublimis), P. *set-va* (sedes), *settyas* (posuit) = *ἕζω*, *sedeo*, Goth. *sitan*, Slav. *sěsti*, Lith. *sė'sti*.
- W. 3. *heul*, V. *henul*, P. *houl* (sol); perhaps, also, O. Gaedh. *soillse f.* (lumen)? = Goth. *sauil*, Lith. *sáulė*, Lat. *sól* (doubtful Gr. *ἥλιος* = *ἄφελιος*, it would be much better to consider it with Curtius = *ausil?*); Slav. *slănice* (deviates).
- [Gaulish *Seno-magus*], *sen*, K. *hen* = Lat. *sen-ex* (Gr. *ἔνη*), Lith. *sėnas* old, *sėnis* an old man, Goth. *sin-eigs* sinista, O.H.G. *siniscalc*; it is wanting in Slavonian.
- teg tech* (domus), gen. *idul-taigæ* (fani), dat. *taig* (the fundamental form is, consequently, **tagi*), W. 3. *ty*, pl. *tei*, Arm. *ti ty*, V. *ti*—from which *tigerne*, dat. *tigerni* (dominus), W. 1. *tigern*; cf. Lat. *tug-urium*; Gr. *τέγος*, O. Norse *þak*, O.H.G. *dach*, Lith. *stogas* (roof). [Ir. *a-staig*.]
- temel* m. (obscuritas), W. 3. *tywyll* (obscurus, obscuritas), V. *tivulgou*, P. *tevolgow* (tenebrae) = Slav. *tĭma*, Lith. *tamsà*, Lat. *tenebrae*, *temere* (blindly), O.H.G. *demar* (crepusculum); it is wanting in Greek.
- [*tana*], W. 3. *teneu* (*temis*), P. *tenewen* (*lütus*); *tenuis*, *ταναός τανν-*, O.H.G. *dummi*, Slav. *tĭnikŭ*.
- tiath*, K. *tut* (populus) = Lith. Lett. Prus. *tauta*, Osc. *tivrti*, Umbr. *toto*, Goth. *þiuda*; it is wanting in Slav. and Gr. (as in Lat.).
- og*, V. *uy*, W. 2. pl. *uyeu* = *ovum*, *ῥόν*, O.H.G. *ei*, Pol. *jaje*, Ch. Slav. *ai-ce jaiće*; it is wanting in Lithuanian.⁸⁸
- fich* (municipium, pagus) = *vicus*, *οἶκος*, Goth. *veiks vëhs*, Slav. *vĭst* (prædium), Lith. *vész-pats* lord, *věse'ti* to be a guest.
- fer*, V. *gur*, W. 3. *gwr* (ground form **vira*) = Lat. *vir*, Goth. *vair*, O.H.G. *wër* (*wëralt* hominum aetas, seculum, generatio), Lith. *výras*, Lett. *wirs*; it is wanting in Slav. and Gr.
- fedb*, V. *guedeu* = Goth. *viduvó*, Sl. *vidova*, Prus. *widewü*, Lat. *vidua*; it is wanting in Greek; *ἡθες* is scarcely connected.
- fescor*, W. 3. *ucher*, V. *gurthuper*, P. *gvesper*, Arm. *gousper* = *vesper*, *ἑσπερος*, Lith. *vákaras*, Slav. *veczerŭ*; it is wanting in German.
- W. 1. *gulan*, V. *gluan*, Arm. *gloan* = Goth. *vulla*, Lith. *vilna*, Slav. *vlina*, Lat. *lana?*; Gr. *ἑριον* is another form.

To these are to be added the generally recurring roots Skr. *as*, *bhû*, *dhâ* (O. Gaedh. *dénim* (facio), Arm. *doen doan*, P. *doyn* (facere), and in the British compounds W. 3. *bydaf*, P. *bethaff*, Arm. *bezaff*, *bizif*), *vid*, *çru* (in all European tongues *klu*) and the numerals below 1000. If some of them are wanting in individual languages, it does not signify much for our present object, as here also we find everywhere agreements between the north and south. For example, *daru* [?] and the root *sru* are wanting in the Latin, *vaskara*, *ghaima* in the Teutonic,

⁸⁸ [The Teutonic words are scarcely connected with the Greek and Latin: O.H.G. *ei*, O.N. *egg*, A. Sax. *ägg*; Crimean Gothic *ada*, point to original *ΑΔΔΙΑ*, compare Skr. *andâ*, *egg*.]

svastar, *tamas*, *vidhavâ* in the Greek, *árja* in the Lithuanian, *akva*, *dacru*, *dant*, *săna*, and the root *sak* in the Slavonian. Even the absence of words from two languages (e.g. Lat. and Lith. *ganâ*, Teut. and Gr. *diva*, Slav. and Gr. *sâuala*, *tautâ*, *vîra*, *aina*, Teut. and Slav. *daiva*) becomes for us of higher significance, only when these are the two nearest related languages, say Latin and Greek, or Slavonian and Lithuanian.

§. 4. Glossarial affinities of the Celtic, Classic, and Teutonic languages.

Of words which are wanting in the Lithuanian and Slavonian, the Celtic has the following in common with the two Classic languages and Teutonic: *aile*, *athir*, *elin*, *palf*, *niule* (?) With the Greek and Teutonic it has, for example:

WORDS AND ROOTS COMMON TO CELTIC, GREEK, AND TEUTONIC.

dark (root—Skr. *drç*): Arm. *derch* (aspectus), O. Gaedh. *airdircc* *erdircc* *irdircc*, pl. *erdarcai* (conspicuus=*περιδεκτής*?), *erdaircigidir* (concelebrat)=*ἐερκα*, O.H.G. *zorht* *zorah*t, *zorft*.

* *K. garan*=*γέρας*, O.H.G. *chran-uh* (in the form) in opposition to Lat. *grus*, Lith. *gervė* f., Slav. *žeravlt* (**gerarjas*) m.

lang (root): *loingtech* (acceptus, gratus), *fulang* (tolerare), *imnefolingai* *imnefolingai* *immoligai* (efficit), *imneforling* *imforling* (efficit)—this form shows the composition, contrary to Zeus 756, notwithstanding *arafulsam* (toleremus)—*indlung* (findo), *indlach* (disceptatio), *cúmlengaithá* (congregiendum); cf. *λαγχάνω*? O.H.G. *galingan*.

trag (root): Gaul. *ver-tragus*; O. Gaedh. *traig*, K. *troit* (pes); *τρέχω*, Goth. *þragja*.

ban ben (root): *dofuibnimm* (succido), *etirdibnet* (perimunt), *indibenar* (ab-

sciditur), *immerudbed* (circumcisis est), *bémen* pl. (vulnera, plagae), [P. *bom*, *bun*], *tóbe* (decisio), *nebhóbe* *nephthóbe* (praeputium), *indibe* (circumcisis), *etardibe* (interritus), *bás* (mors), *bathach* (moribundus); secondary root *bal in*: *epil* (interit), *atbela* (moriatur)=*φεν* in *φόνος*, *πέφνον*, *πεφύσομαι*, *δδυνήφατος*, Goth. *banja* a wound, O.H.G. *bana* f. (homicidium), *bano* m. (occisor), *banón* (quater, exercere), O. Norse *bana* to kill, *bani* m. (occisor, homicidium).

(?) *borg* (*borcc*, *borggde*), P. *burges* (burgensis)=Goth. *baurgs*, also Gr. *πύργος* (*φούρκος*)? — (may have been borrowed from the German).

gen, dat. *gün* (os, oris)—compare *χαίνω*, O.H.G. *ginén* *ginón*?; the Latin *hiare* has different forms.

[*scath*], V. *cuic* (umbra)=Goth. *skadus*, Gr. *σκότος*?

sid, W. 3. *hedwech* (pax)=Goth. *sidus*, Gr. *ἔθος*, *ἡθος*?

The following are Celtic, Latin (or Italic), Teutonic:

WORDS AND ROOTS COMMON TO CELTIC, LATIN (OR ITALIC), AND TEUTONIC.

ad—O. Gaedh. only in combinations, as already in Gaulish, Kymric *ad*- and *at* (difficult to be distinguished from *aith*=**ati*, see Beitr. I. 312)=Lat. *ad*, Goth. *at*. [But also Lith. *at*.]

asil, K. *esel* (membrum)=Lat. *ala*, *axilla*, O.H.G. *ahsala*?

al (root): *notail* (qui te alit), *altram*

(nutritio)—Lat. *alo*, Goth. *alan*, *aljan*, O. Norse *alo*.

[*caech*], V. *cuic* (luscus, monophthalmus)=Goth. *haihs*; Lat. *caecus*.

W. 3. *crych* (Gaul. *Crixus*?), O. Gaedh. *críchaib* (sulcis), W. 1. *críched* (ruga)=Lat. *crispus*; O.H.G. *krús*.

Gaulish, *κάρνον* *την* *σάλπιγγα*, Hesych.

- (*καρνυξ*, Schol. II. σ, 219), Kym. *corn* = Lat. *cornu*, Goth. *hauru*.
gabor (caper), W. 2. V. *gauar*, W. 3. *gafar* (capra) = Lat. *caper*, *capra*, O. N. *kafr*, Ang. Sax. *hæfer*.
gab (root), Kymr. *cav* (i. e. *cabh*) = Lat. *capiō*, Goth. *huffa*.
li, W. 3. *lliv*, P. *lyw* (splendor, color, gloria) — V. *liuor* (pictor), *disliu* (deformis) — Lat. *liveo* *liuor* *lividus*, O. H. G. *pli pliwes* lead (Stokes).
nathir, V. *nader* = Lat. *natrix*, Goth. *nadr*, O. H. G. *natra natara*. (The O. Gaedh. with its declension, stands as it were midway between Teutonic and Latin).
nessa, superl. *nesam* = Osc. Umbr. *nessimo*, Goth. *nēhv-*, already alluded to. [*niae*], V. *noi* = Lat. *nepos*, O. H. G. *nefo*, A. Sax. *nefa*, and
necht, V. *noit* = Lat. *neptis*, O. N., A. Sax., O. H. G. *nift*, O. H. G. *niftila*.
[*nid*], V. *neid* = Lat. *nidus*, A. Sax., O. H. G., *nest*. (The Slav. *gnězdo* is obscure.)
V. *pisc* = Lat. *piscis*, Goth. *fisks*.
[*ri*, gen.] *riq*, V. *ruy* = Lat. *rex*, Goth. *reiks* (O. H. G. *richi*).
W. 1. *taguel*, 2. *tawel* (silens), W. 3. *tewi* (tacere), W. 3. P. *taw* (tace) = Lat. *tacere*, Goth. *þahan*?
rect *recht* (lex), W. 2. *reith reyth reis* (lex), Arm. *reiz rez* (rectus, justus) = Lat. *rectus*, Goth. *raihls*, O. H. G., O. Sax. *reht n*.
tenge, gen. sing. pl. *tengad* = Goth. *tuggō*, Lat. *lingua* (diqua), although with a different suffix in each language.
drog droch, W. 3. *drwc*, P. *drok* (malus), W. 3. *drycket* (malitia), O. Gaedh. *drochguim*, acc. pl. *drochguimu* (malefactum), V. *drocger* (infamia), *drocgeriut* (infamis), *drochoberor* (maleficus) — cf. Lat. *trux*, O. H. G. *triugan* — Skr. root *druh*. [cf. *द्रुह*?]
V. *guins*, P. *guyns*, Arm. *guent* (i. e. Kymr. **guint*) = Lat. *ventus*, Goth. *vinds*. [Skr. *vāta*.]
caille (velamen) — cf. Lat. *occulo*, *celo*, O. H. G. *helan*, *heli f.* (amictus, velamentum), Goth. *huljan*, O. H. G. *hulla* (hülle); [*caille* is probably borrowed from *pallium*.]

§. 5. Glossarial affinities of the Celtic, Teutonic, and Lito-Slavonian languages.

Among the words the Celtic has in common with the Teutonic, Lithuanian, and Slavonian, besides those above quoted, which recur in Latin or Greek, we must no doubt remove many more which have come into all or several of these languages in the same way, by borrowing from the Latin, as for example: *angelus* = Lith. *àngėlas*, Ch. Slav. *anĭgelŭ*, O. H. G. *angil*, *engil* (Got. *aggilus* from the Greek), O. Gaedh. *angel aingel*; or *apostolus* = Lith. *apásztalas*, Ch. Slav. *apostolŭ* (Goth. *apaustaulus*), O. H. G. *postul*, Arm., Corn. *apostol*, O. Gaedh. *apstal*. Mutual borrowing among the other languages did not take place to anything like the same extent, and we run much less risk of mistaking the apparent relationships due to borrowing for primitive relationships, in this case, than in the comparison of the Celtic and Latin. The Cornish has borrowed the most from the Teutonic languages (especially from the English), like the Armoric from the Romance (French), next to them the Welsh; the mutual influence between Gaedhelic and the Teutonic tongues may be considered as evenly balanced. The following are certainly borrowed: V. *mesclen* N. H. G. *muschel*, *redior* = Eng. *reader*, *hering* Eng. *herring*, *hot* (caputium) = Eng. *hat*, *roche* (fannus), *streing* (fibula) = Eng. *string*,

P. strek (radius sanguinis), *strekis* (plagae)=*strike*, *V. strifor* (contentiosus), *P. stryff* (contentio), *strevye* (altercari)=*strive*; *W. 3. helym helm*, *iarl* (comes)=O.N. *iarl*, A. Sax. *eorl*, *ysl(e)ipanu*, to draw or tie (a bow), *yswein* pl. *ysweinieit*=O.N. *swein* (Eng. *swain*), *ysmwg* (vapour)=Engl. *smoke*. On the other hand, *W. 2. 3. talu* (solvere) and the German *zahlen* have, perhaps, come from a common source.

The agreements of the Celtic with all three languages, or, at all events, with the Teutonic and Slavonian, at the same time, are certainly not exceedingly numerous, but for the most part all the more significant. Thus we again meet in Celtic with certainly a part, and very probably others, of those very words and forms which Schleicher has pointed out as exclusively common to the Teutonic and Slavonian.

WORDS AND ROOTS COMMON TO CELTIC, LITHUANIAN, SLAVONIAN, AND TEUTONIC.

aball (malus), *W. 2. aball* (mali), *abal-len*, 2. 3. *V. auallen* f. malus), *P. avell* (pomum), *W. 3. aual*, pl. *au ileu aneleu* (poma), *hwylbrenni* (mali)=A. Sax. *äppel*, Frisian *appel*, O.H.G. *aphul aphol*, O. Norse *epli* n. (malum); Lith. *obelis* f. (malus), *obūlus*=Lett. *ābols* (malum); Slav. *jablūko jablūka* (pomum), *ablunī ablonī jablanī* (malus).

crocann, *crocenn* (receptaculum), *W. 3. crochann* (vas, olla), *V. crogen* (concha)—cf. O.H.G. *krug* (lagena, amphora); Ch. Slav. *krūczagū* (vas fictile), *krūczimnica* a drinking house, *krūczivnikū* host; Lith. *karczama* a drinking house (N.H.G. *krug*)—Lett. *krōgs* borrowed.—?

crauell f. *W. 2. (pala fornacea)*, *V. grauior* (sculptor)—Goth. *graban*, Sl. *grebq* (fodio), *grobū* (sepulcrum), Lith. *grabas*; the root is also no doubt Gr. (γράφω), but with this signification it is, according to Schleicher, Teutonic and Slavonian.

dodālim (fundo), *fodāli* (distinguit), *fondrodil* (qui id divisit), *fodlaidi* (dividendus), *fōdail fodil* (divisio)—also *dil* (gratus), *diliu*, *dilem*; *diles* (proprius, certus, fidelis)?—*W. 1. didaul* (expers)=Goth. *dailjan* (dividere), Sl. *dělitī*, Lith. *dalyti*, Lett. *dallit* to share, Prus. *dellieis* imper. share with; Goth. *dails*, Lith. *dalīs* f. a share.

W. 1. drogn (coetus), *drog* (factionem), i.e. no doubt *drogg drong*—cf. the perhaps Gaulish, *drungus* (a troop) with its un-Latin anlaut [dr]—Goth.

driugan to perform military service, *gadrauhts* a warrior, O.H.G. *truhtin* (dominus), *truhtinc* (paranymphus), O. Norse *drótt* f., pl. *dróttir* a troop, servants, *dróttinn* lord, *dróttning* queen; Lith. *draugas*, *draugalas* a companion, partner, Sl. *drugū* (socius, alter, amicus), Lett. *draudse* (i.e. **draugia*) a community.

du do, K. *do dy di y*=Goth. *du*, A. Sax. *to*, O.H.G. *za zi zuo*, Slav. *do*, Lith. *da-*, is wanting in O. Norse.

Ir. *droighean*, Welsh *draen* has been compared by Grimm (Gesch. d. d. Spr. 1028) with Slav. *trūnū*, Goth. *þaurus*; this comparison is, however, only right if a guttural be supposed to have fallen out in the Skr. *trṇa*, Goth. and Slav., so that Lat. *truncus* and Gr. *τέρυχος* might also be connected therewith. O. Gaedh. *draigen* ("pirus") and *V. drain* (spina), pl. *V. Arm. drein*, *P. dreyn*, are found in Zeuss along with O. Gaedh. *driss* (vepres), *dristenach* (dumetum), *W. 3. dryssien* f. (frutex)?

V. er (aquila)=Goth. *ara*, Lith. *eris* (Beitr. I. 234), *erelis*, Lett. *ērglis*, Slav. *orilū*.

[*géd*], *V. guit* (auca), i.e. **guid* (anser)=N.H.G. *genter*, A. Sax. *gandra*, O.H.G. *ganzo*, Pliny *ganta*; also Lith. *gāndras* (a stork)?

mang macc (root) (already spoken of in the Zeitschr. VI. 238 in the signification *augere*, also in existence in derivatives *mar* (magnus), *macc* (filius)—the Goth. *mag* (possum)=Sl. *mogā*,

Lith. *moku moke'ti* (to be able, to understand, to count, pay), etc., are specially represented by O. Gaedh. *cumaing cumáing* (valet), *cumang* (potestas, posse), *cumacc* (potens), *cumacht cumacht(a) n.* (potentia)=W. 3. *kyfoeth kyuoeth* (potestas), O. Gaedh. *cumachtach* (potens), comp. *cumachtchu* (potior)=W. 3. *kyuoethawc* (potens), V. *chefuidoc* ("omnipotens"). Especially the Lithuanian *tenuis* agrees in a wonderful manner with the Celtic forms.

menicc menic, W. 3. *mynych*, P. *menough* (frequens)=Goth. *manags*, Slav. *mnogŭ* (multus); O. Gaedh. *meince* (abundantia)=Goth. *managai*, N.H.G. *menge*; *mencaín* (penus).

nocht-chem (nudus capite), P. *noyth*, Arm. *noaz* = Goth. *naqvaþs*, O. Norse *naktr* (nakinn), O.H.G. *nachat*; Slav. *nağŭ*, Lith. *nūgas*.—The Lat. *nudus* is a different form; it is wanting in Gr.

W. 3. *priawt*, V. *gur priot* (sponsus), Arm. *priet* (maritus)=O.H.G. *früidil fridil*, M.H.G. *vriedel* (amasius), also used for the husband)—Lith. *prētelius*, Sl. *prijatelj* (amicus). Either *priawt* is to be compared with *brawt* (frater), therefore almost exactly=O.H.G. *früidil*, &c. (with *l* for *r*), or a participle (amatus), to which the Welsh per. pass. W. 3. *-at, -et, -it, -uyt, -awt*, and Arm. part. (*-et*) accurately agree; in the latter case the adj. *priawt* (proprius),—from whence also W. 2. *ampriodaur* (non possidens),—represents the Homeric *φίλος* and N.H.G. "*werth*" (cf. *my priawt person*, in (his) proper person). It is in any case one of the most interest-

ing agreements between the Celtic, German, Slavonian, and Lithuanian.

sil (semen), W. 3. *heu* (serere), *hewyt* (saturni est)—connects itself to a root form, which, according to Schleicher, is exclusively Germano-Slavonian: Goth. *saian*, Sl. *sejati*, Lith. *sė'ti, sėklà, sė'mens*.

The root *rād*, no doubt general, but in certain significations only Celtic, Teutonic, Litho-Slavonian (cf. Beitr. I. 426 seq.)

snechtŭ (nives)—the root is general (fundamental form **snigh*), but the *s* has only been preserved in the northern languages: Lith. *snėgas*, Slav. *sněgŭ*, Goth. *snaivs* (= **snaigas, *snaigvas*); in the Gr. *ἀγάννιφος* there is still a trace (= **ἀγάσνιφος*); in the Lat. *nix nivis* (= **nihvis, nigvis*) it has wholly vanished.

flaith f., gen. *flatha flatho* (imperium), *fla(ð)themnacht f.* (gloria, dignitas, gradus), *flaithemnas* (gloria), W. 3. *gwlat* (regio), pl. *gwladod gwledyd*, V. *gulat* (patria), P. *gulas* (terra)—fundamental form **vlati* with the same transposition of the medial to the *tenuis* as in *ithim* (edo)—V. *rudoc* (dives), W. 1. *guletic* (potens), 3. *gwledic* (imperans, princeps)—Goth. *valdan*, Sl. *vladiti vlasti vladà* (imperare), Lith. *valdaũ valdŭti*, Lett. *waldit* (N.H.G. *walten*, to govern).

W. 3. *gwerth* (pretium), *gwerthawr* (pretiosus), P. *gwerthe* (vendere), *gorthye* (venerari)—Goth. *vairþs*, Lith. *vėrtus*, Pruss. *werts* (the latter was perhaps borrowed, as the Polish *wart* certainly was?).

§. 6. Glossarial affinities of the Celtic and Teutonic.

The correspondences with the Teutonic are most numerous; some of them are no doubt the result of borrowing, while in the case of others, the relation is not clear; many, however, give no occasion for such a supposition. Compare for instance:

WORDS AND ROOTS COMMON TO CELTIC AND TEUTONIC.

agathar (timet), *aichthi* (timendus)=Goth. *ôg, ôgan*.

aithirge iðirge (poenitentia), *aidrech* (poenitens), *tuilirge* i. e. *do-aithirge* (misericordia), P. *eddrech, edrege*, *poenitentia*=Goth. *idreiga*.

arbae orpe n.=Goth. *arbi*; *orpan m.*, pl. *horpanin*=Goth. *arbja, comarpe*=*guarbjja*; *comarbus* (cohereditas); *nomerpinn* (trado me, confido), *no-birpaid* (tradite vos, confidite), *nachiberpidsi* (ne conf.), *roerbad* (com-

- missum est) pl. *roairptha*; *imarbar* (abigitur, removetur), *arenindarbe* (ut abigat), *nachimrindarpai-se* (quod non me repulit), *arnachitrindarpither* (ne sis exheredatus) represents exactly N.G.H. *enterben*.
- baga* (contentiones), *bagim* (glorior), *bāgul* (praeda)—O.H.G. *bāgan biag* (contendere, objurgare), *bāgēn* (contendere), *bāgu* f. (contentio), O. Norse *baga* (obstare, resistere), *baeg-jask* (vexare, molestare), *bāgi* m. (difficultas), *bāgr* (molestus).
- biail* *biail* *buail*, W. 1. *bakell*, 2. *buyall* (securis), 1. *laubael* (handbill)—O.H.G. *bihal* *pihal* *bigil* *pigil*, M.H.G. *bil*—still unexplained in both languages.
- boly* *bolc* (uter), Gaul. *bulga*=Goth. *balgs*, O. H. G. *palc*, O. Norse *belgr* (follicis, uter).
- borg*=Goth. *baurgs* (see supra).
- (?) V. *boch*=O.H.G. *boch poch*, O. Norse *bokki*, A. Sax. *bucca*—cf. O. Gaedh. *cuilennbocc* ("cynyps")—borrowed from the German, according to Grimm.
- W. 3. *bwa* (arcus)—O. Gaedh. *fidbocc* (arcus ligneus)—O. Norse *bogi*, A. Sax. *boga*, O.H.G. *bogo poco*.
- W. 3. *burd* *bord* m., pl. *byrdeu* (mensa)=Goth. *baurd* a board, *fótubaurd* a footstool, O. Norse *borð* n. a board, table, ship, O. H. G. *bort* *borti* *borto* m. (ora, navis, mensa).
- W. 3. *blodeu*, V. *blodon* (flos)=O.H.G. *bluot* f., M.H.G. *bluot* m. f., pl. *blüete*.—the Lat. *flos* has a different suffix.
- bróen* (pluvia)=Goth. *rign*. The root also in βρέχω, Lat. *rigo*, the special word-formation only recurring in the Teutonic.
- buaid* f. (victoria, bradium), *buide boide*, Z. 611 *gratiae*, *buidech* (gratus, contentus), *ho-buidnib* (copiis); W. 1. 3. Arm. *bud* (bradium, victoria, fortuna), W. 1. *budicawl*, 3. *budugawl* (victoriosus, felix), W. 1. *bodin* (turma), pl. *bodiniau*, 3. *bydin* f.—the root is the same as in Goth. *ana-biudan*, *faurbiudan* (jubere, mandare), the fundamental signification was probably to announce=Skr. *bôdhayâmi* (denuntiare); cf. N. H. G. *aufgebot* with *bodin*.—The signification is different in Slavo-Lithuanian.
- (?) W. *bad* m., pl. 3. *buden* (scaphae)—cf. O. Gaedh. *bádud* (nauffragium)=*boot*, not High German, O. Norse *bátr*, A. Sax. *bât*—borrowed from the Celtic, according to Grimm.
- cath*, K. *cat* (pugna)—Gaul. *Caturiges*, *Catuslogi*—O.H.G. *hadu* (only in names), A. Sax. *heaðo*, M.H.G., N.H.G. *hader*.
- (?) W. 1. *carr*, 2. *car*, Gaul. *carrus* (Caesar).—O.H.G. *karra garra charra* f., O. Norse *kerra* (appears to have come into German through borrowing).
- W. 3. *crayf* (firmus), P. *crayff*, *creff* (fortis, gravis), Arm. *creff* *creff* (firmus, tenax), *criff* (fortis), *crayf* (avarus), W. 3. *kyngryfet* (aqua fortis), *crayfu* (fortiter incedere), *crefft* (ars)—cf. O.H.G. *chraft* (not in Tatian), A. Sax. *craft*, O. Norse *kreftr*, and *kramph*.—?
- cruim* (curvus)=O.H.G. *chrump*, A. Sax. *crumb* (remoter and doubtful Lat. *curvus*, Lith. *kreivās*, Slov. *krivŭ*).
- W. 2. *cussan*, V. *cussin* (osculum)—O. Norse, A. Sax. *coss*, O.H.G. *chus*.
- dorche* f. pl. (tenebrae)=A. Sax. *dēore*, Eng. *dark*, O.H.G. *turch*, O. Norse *döckr* (obscurus).
- din* (arx), W. 2. 3. *din* (castellum)=O. Norse, O. Sax. A. Sax. *tún*, O.H.G. *zün*, Engl. *town* (on the names of places see Beitr. II., part 1).
- gabul* (furca, patibulum)=O.H.G. *gabala*.
- gaide* (pilo praeditus), Gaul. *Gaesati*, *gaesum*=O.H.G. *gēr*, A. Sax. *gār*.
- gell* (pignus)=Goth. *gild* (tributum)? (see *giall*).
- V. *ghel* (sanguisuga)=O.H.G. *egala*, *ecala*.
- W. 3. *gerthi* (virga), V. *garthou* (stimulus) may, no doubt, be compared with the O.H.G. *gartja* (switch), but the Goth. *gazds*=O.H.G. *gart*, N.H.G. *gerte* (goad, switch, whip), points to a borrowing into Celtic from the Teutonic.
- giall* (obses) (*gell* (pignus) Z. 64, see supra), V. *guistel* (obses), W. 3. *giwystyl* (obses, pignus), P. *gustle* (spondere), Arm. *goestlas* (spopondit)=O.H.G. *gisal*?
- (?) *glass* *glas* (glaucus), Arm. *glisi* (livor, aegritudo)—O. Norse, O.H.G. *glas*, A. Sax. *gläs* (vitrum).
- V. *grou* (arena)—O. Norse *griot* (lapides, saxa), A. Sax. *grēot* (scobs), O.H.G. *grioz* (glarea).
- (V. *hos* (ocrea), W. 3. *hos(s)an*, pl. *hossaneu* (braccæ)=O.H.G. *hosa* (caliga), A. Sax. *hos* (calcaneum), *hosa* (caligae). Evidently borrowed, but by whom?

(W. 2. *hucc* (sus), V. *hoch* (porcus)=Engl. *hog*; the latter appears to have been borrowed from the Celtic (*h=s*, therefore related to *sus*). According to Grimm, it was the Celtic which borrowed from the German, N.H.G. *haksch* (verres)—?)

iarn (gen. *hiarn*. Inc. Sg.), W. 3. *heyrn*, V. *hoirn* (O. Arm. *haiarn*-, *hoiarn*-)=Goth. *eisarn*, O.H.G. *isarn*, O. Norse *isarn iarn*.

[*eo*], V. *hiuen* (taxus)=O.H.G. *uca* f.; A. Sax. *iw*, O. Norse *ýr* m. (cf. Zacher das Goth. Alph. p. 10. seq.)

[*lár*], W. 1. *laur*, 3. *llawr* (solum), V. *lor*, P. *ler lear* (pavimentum, solum)—with the dropping of *p*=*flur*, M.H.G. *vlur*? (Grimm 307 also compares A. Sax. *flór*, Engl. *floor*).

V. Arm. *lagat*, P. *lagas*, W. 3. *llygat* (oculus)—A. Sax. *lócian*, O.H.G. *luogên*, N.H.G. *lügen*—Skr. root *lax*? *land*: dat. *isind- iðlains* (in area), W. 3. *lann* (area, ecclesia), O. Arm. *lann*, Ital. Fr. Provençal *landa*, *lande*=Goth. *land*.

V. *loven* (pediculus)=O.H.G. A. Sax. O.N. *lús* (?)

lén (saltus), W. 1. *lammam* (salio), *lemenic* (salax), W. 3. *llemlhyd* (saltator)=M.H.G. *limpfen* to limp (*lam* N.H.G. *lahm*, Engl. *lame*)? Thence also W. *llamp*=Goth. *lamb* (the hopping)?

loathar (pellis)=O.H.G. *ledar*, O.N. *ledr*; A. Sax. *lēðer* (funis)?—The meaning would answer, yet the Gaedh. *oa* and the O.H.G. *ē* differ.

marc, K. *march* (Gaul. acc. *mapkav*)=O.H.G. *marach*, f. *meriha*, M.H.G. *march* (*marc*).

mí- (is wanting as a prefix in Kymric)=Goth. *missa*, N.H.G. *mis-*. To this is to be added the comp. *messa* (pejor); further W. 3. *gormes* f., pl. *gormesseu gormessoed* (miseria, afflictio, infortunium).

mong, W. *mung*, pl. W. 1. *mogou* (read *moggou* i.e. *mongou*)=mähne, O.H.G. *mana*, once *manha*, M.H.G. *man* (?)

mucc, W. 3. *moch* (sus), according to Grimm N.H.G. *mucke* (?)

W. 3. *ychen* pl., O. Arm. *ohen*=Goth. *auhsans* (the Latin *vacca* deviates).

ós, *úas*, *uch*, Corn. *ugh*, Arm. *us* (supra), gen. *úasal*, K. *uchell* (altus)—cf. Gaul. *Uxellodunum*, Brit. *οὔξελλον*, *οὔξελλα*—Goth. *auhuma*, *auhumists* (supremus). The Picenian *Auximum*

has a different meaning (Zeitsch. III. 248).

labar, Kymr. *lavar* (loqui), O. Gaedh. *amlabar*, V. *aflluar* (mutus), *mab aflluar* (infans)=N.H.G. *plappern* (*blappen*, *blappern*)?—Bopp compares Skr. *lap*, the *l* appears however to be old.

rún, K. *rin*=Goth. *runa*, O. H. G. *rún* (mysterium).

sam (sol), W. 1. *ham*, 2, 3. V. *haf*, Arm. *haff* (aestas)—O. N., O. H. G. *sumar*, A. Sax. *sumor sumer*.—Also Goth. *sunna*, *sunno*, A. Sax., O. N. *suma*, O. H. G. *sunna sumna*? Pictet and Leo Meyer (Zeitschr. IV.) have explained differently.

scoloca (servi [scholastici?]), *banscala* (servae)—Goth. *skalks*?

seol sóol (velum, carbasus), W. 1. *huil*, V. *guil* (velum)=O. N. *segl*, O. H. G. *segal*, A. Sax. *sēgel*.

sēt (via), dat. *sēt*, pl. *seūt seuit*; *sēthe* (uxor), dat. *sēthi* (properly a female fellow-traveller, *Gefährtin*; a word from the nomadic time?); W. 1. *hint*, Arm. *hent* (via), thence V. *canhinsic* (injustus), *emhinsic* (justus)=Goth. *sinps*; O. H. G. *sind* m.

slíci m. pl. (ostreae), Sg. *slice* (lanx)=O. H. G. *snecco* (limax), A. Sax. *sne-gel* (limax, cochlea, testudo), O. N. *snigil* (limax), more especially M.N.L. *slecke* (limax).

snáthe m. (filum), dat. *snáthiu*; V. *snod* (vitta), V. W. 3. *snoden* (filum), W. 3. *ysnoden* (vitta)—cf. O. N. *snara* (laqueus), O. H. G. *snur* f. (filum) from the same root.

[such and] W. 1. *suh* (vomier) according to Haupt in Z.=O.H.G. *sech*(?).

tré, tri, Kym. *trui*=Goth. *þairk* (Beitr. 1. 312).

uile, K. *oll*=Goth. *alls*.

(*h*)*uathath* (*h*)*uathad* *húathad* *hothad* (singularis, singularitas), gen. *uathid* *hodid*, dat. *óthud* *uathuth*, acc. *hua-thuth*; *úathed* (singularis, solus, solitarius); f. acc. pl. *huathati* (singulares), dat. pl. *uathatuib* (*t=thth*); *óthatnat* (pauculus)—of one stem with *óa* (minor) from Skr. *ava*; but also comparable with Goth. *anþeis* (desertus) N.H.G. *öde*=Skr. **avatya*. [? Lat. *pau-cus*].

fén (plaustrum), Brit. Belg. *covinus*=O. N. *vagn*, O.H.G. *wagan*, A. Sax. *vāgen*. (The Greek and Slavonian have different suffixes).

fiadnüsse (testimonium)=O.H.G. *giwiz-*

nesi f., *guciznes* n., A Sax. *gevitnesse*, *folcain* *folcainm* (humecto, lavo), W. *gevitnes*, Engl. *witness*.
fid n., K. *guid*, Gaul. *vidu*=O. N. *viðr* m., O. Sax. *vidu*, A. Sax. *vudu*, O.H.G. *witu* n. (Beitr. I., 160), with an equal change of meaning, thence, for example, V. *colviden* (corylus), with the singulative suffix.
folcain *folcainm* (humecto, lavo), W. 2. 3. *golchi*, Arm. *guelchi*, P. *golhy* (lavare)—A. Sax. *volcen*, O. Sax. *wolcan*, O.H.G. *wolchan* (nubes) as moist or moistening?
W. 3. *gwyllt*, V. *guill*, P. *gwyls*=Goth. *vilþeis*.

§. 7. Glossarial affinities of the Celtic and Lito-Slavonian.

The exclusive agreements between the Celtic and the Lito-Slavonian are very much less numerous. To these belong, for example:—

WORDS AND ROOTS COMMON TO CELTIC, LITHUANIAN, AND SLAVONIAN.

Gaedh. K. *bran* (corvus)=Slav. *vranŭ*, Lith. *várnas* (corvus), *várna* (cornix).
W. 3. Arm. *gallaf*, P. *gallof* (possum, potero)=Lith. *galŭ gal'ėti*.
Gaedh. *nem*, K. *nef*, Sl. *nebo* n., Lett. *debbes* f. with the signification heaven (contrary to Lat., Gr., Lith., and Germ.).
caire f. (accusatio, nota, culpa), *cairigud* m. (reprehensio), [W. 1. *cared*, gl. nequitiae,] W. 3. *keryd* m. (reprehensio)—Ch. Slav. *karati* (rixari), Lith. *koravoti* (punire).
Gaedh. *cruim* in the form=Lith. *kirmis* (the Lat., Gr., and Germ. have lost the *k*).
W. Arm. *merch* (filia, puella), V. *moroin*, W. 3. *morwyn* (puella) [O. Ir. *moru*] perhaps=Lith. *mergà, mergėlė*?
W. 1. 2. *melin*, 3. *melyn* (flavus, lividus), f. 1. *melen*, pl. 1. *milinon*, 3. *melynynon*, V. *milin* (fulvus, flavus)=Lith. *mėlynas* blue? according to Diefenbach (Beitr. I. 483) from M. Lat. *melinus* = *μῆλινος*, in this case, however, we ought to expect Kymr. *muilin*, *moilin*.
(?) *ghin*, W. 3. Arm. *ghin* m. (genu)—perhaps=Sl. *kolěno* (genu), Lith. *kulnīs*, heel, *kelys* knee? (*y* instead of *k* in *gabor*, *gabinnm* also).

Finally, the Celtic also is of course not wanting in words which heretofore have not been found in any primitively related tongues, or, at least, in any European language. Of the first kind is, for example, *tene*, K. *tan*, in contradistinction to the Skr. *agni*, Lat. *ignis*, Lith. *ugnīs*, Sl. *ognŭ*, as well as to the Greek *πῦρ*, Umbr. *pir*, O.H.G. *fiur*: among the special agreements with the Sanskrit, the similar nomenclature of the points of the compass (Z. 67. 566) is particularly remarkable.

All these glossarial agreements and deviations would of course, taken by themselves, prove very little, as we find even between the most nearly related idioms, striking differences, such as between Slav. and Lith. in the case of the name of God, between Lat. and Umbr. in the appellation of fire. Where, however, the same or nearly related words recur in great numbers, there we have at least every inducement to further investigate whether special agreements may not be found in the grammar also, and in this expectation we are rarely disappointed. Among the words and forms quoted in the preceding pages (and I believe I have been perfectly impartial in their selection), there recur exclusively

about fifty undoubtedly in the Teutonic tongues, not quite forty certainly in the Latin; if to these we add about twenty which certainly recur in Latin and Teutonic, about a dozen in Latin and Greek, at least as many in Teutonic and Lito-Slavonian, it follows that the degree of relationship between the Celtic and Teutonic on the one hand, and the Celtic and the Latin on the other, is pretty nearly the same, with however some preponderance to the side of the Teutonic, which is still further somewhat strengthened by the few Teutonic-Greek agreements. The Lithuanian and Slavonian on the one hand, and the Greek on the other, are decidedly further removed as regards glossarial resemblances, being as compared with each other about equal. With the Celtic they are chiefly connected by the Teutonic and the Italic tongues. The Celtic prepositions also show that a similar proportion is to be expected in the grammar; among them, for instance, *ad* is again found in Teutonic and Latin only, *di* and *tar* only in Latin, *tre* only in Teutonic, and *du* in Teutonic and Slavonian.⁸⁹ The prefixes *du-* and *su-*, which otherwise are everywhere wanting, lead nearer to the Greek, while the privative *an-* is again found in Greek, Teutonic, and Latin (the Sl. Lith. *u-* in, for example, *ùbagas*, *ubogũ*, appears to correspond rather to the Skr. *ava-*).

§. 8. Phonological affinities;—Vocalismus.

In Phonology, the principles according to which we might judge of an earlier or a later separation of tongues, are as yet by no means finally established, and agreements between unrelated languages, and differences between the nearest related ones here present themselves often so strikingly, that we should avoid deciding about their relationships according to such data. Thus, for example, the treatment of the mutes in O. Gaedh. agrees in the most wonderful way with that in the Hebrew (מִנִּי, מִנִּי, מִנִּי, מִנִּי, even מִנִּי instead of מִנִּי), while the Polish wholly departs from the Slavonian rules (as in *wilk*=Lith. *vilkas*, in opposition to O. Slav. *vlākũ*). I think that a geography of sounds is chiefly wanting to arrive at a conclusion as to how far the phonetic laws of languages are affected by physical, genealogical, or social influences;⁹⁰ in this the vocalismus

⁸⁹ [*Du* occurs in composition in O. Lat.: in-*du*-perator, in-*du*-pedio.]

⁹⁰ [I am glad to find that so competent a philologist as Ebel has come upon this idea of a geography of sounds, which, so far as I am aware, I was the first to put forward, though crudely, in Vol. II. of the *Atlantis*. If such a man as Dr. Ebel were to turn his attention to this subject, the foundation of an important branch of science might be laid. Brücke's attempt to classify all the articulate sounds which could possibly be produced by the tongue (*Grundzüge der Physiologie und Systematik der Sprachlaute*. Wien, 1856), affords a basis to begin upon, for if we

as well as the consonantismus, and the relations of both to one another, should be taken into account. The above-mentioned phonetic similarity of the Gaedhelic and Hebrew, for instance, appears to be due to similar physical conditions; the sporadically occurring one of the Polish with the Lithuanian to social (historical) circumstances. The agreement already pointed out by Lottner of the Goth. *mikils* with the Gr. and Lat. *μέγας magnus*, in contrast to the Skr. *mahat*, appears to point to a closer relationship between the European tongues; so in like manner the Goth. *daur* with Gr. and Lat. *θύρα, fores*, in contrast to Skr. *dvāra*. One of the most important points in connection with, and most conclusive evidence of, earlier or later separation of the individual languages, namely, the elementary development of the vocalismus, can be followed out with clearness unfortunately only in a single language, the Gothic. The Gothic triad of the short vowels *a, i, u* (as in Skr. and O. Persian), speaks unanswerably for a proportionably early separation of the Teutonic from the other European tongues, at a time when none of the then united languages had developed an *ē* and *ō*; in like manner the Lithuanian must have separated from the Slavonian before the latter had developed an *ō*; the Lithuanian from the Lettish before the long *ā* was changed into *ō*. The Latin and Greek, on the other hand, admit of the assumption of *ē* and *ō* before their separation. The sign no doubt only, and not the sound of *o*, was wanting to the older Umbrian and the Oscan. The Latin and Greek afford a marked contrast to the Teutonic in the circumstance, that perhaps everywhere in them, certainly at least as the rule, the *ā* has been changed into *i*, only through *e*; in the Latin also through *o* into *u*; in Teutonic, on the other hand, it is the reverse, *a* being changed into *e* through *i*, and into *o* through *u*. The Celtic takes in this respect so far a middle place, inasmuch as a direct passage of *a* into *o* (and *e*) cannot be denied already in Gaulish nominatives like *Σεγομαρος*, and accusatives as *νεμητον*, as also in the (primitively long) Old Gaedhelic genitive endings *-o* (I. 177, 180); it places itself, however, by the side of the Teutonic by the circumstance that in both living branches *u* has passed into *o*, *i* into *e* (not *o*, *e* into *u*, *i*), and just as in Teutonic partly by breaking (*fer: *firas*=O.H.G. *wolf: Goth. vulfs*), partly by simple weakening (Arm. *ed: Welsh and Cornish yd*=O.N. *son: Goth. sunus*; compare also Slav. *snocha, denŭ* for older *snŭcha dŭnŭ*), and the *u* and *i* appear here also for Sanskrit *a*, without the middle stages

knew all possible sounds, and could classify them, we would merely have to determine in what part of the world each sound occurred. I hope to return to this subject at another time.—W.K.S.]

o and *e*, as in Teutonic and Slavonian: *éóic*, Kym. *pimp*=Goth. *þimf*=Skr. *panca*; Gaul. *dula* (πεμπέδουλα probably Graecised)=Skr. *dala*; *duine* Kymr. *dyn*, *den* (homo), perhaps from a root *dan*=*ῥαν* in *ῥνητός*? Decide, therefore, as we may regarding the interesting agreement spoken of in Beitr. I. 163, of the Celtic and Teutonic in breaking andumlaut, whether we recognize herein with Lottner (Zeitschr. VII. 27. cf. Schleicher KSl. Formenlehre p. 11) a certain family likeness, or in consequence of its later origin, leave it with Schleicher (Beitr. I. 442) unnoticed, the direct passage of *a* into *o* and *e* (*ocht*, *ech*=*octo*, *equus*) should not, at all events, be looked upon as a proof of a closer relationship to the Latin, especially as it also occurs in Slavonian, the *o* of which nevertheless was evidently originated only after its separation from the Lithuanian. Vowel-changes analogous to those in Teutonic and Slavonian are besides also found in the Celtic roots: *guidimm* (precor), where *ui* is umlaut from *u*, along with *ro-gád* (rogavi), *fodáli* (distinguit), along with *fo-ro-díl* (divisit), *lánad*, along with *linad* (completo), *bráth*, along with *breth* (judicium). I will not, however, lay much stress upon all these agreements, in consequence of the uncertainty which still generally prevails in such questions. But in the diphthongal system the Celtic comes decidedly nearest to the Teutonic, and at least much nearer to the Lito-Slavonian than to the Latin or Greek. The Teutonic starts from four diphthongs: *ai*, *ei*, *au*, *iu*, and after all the changes has returned in New High German to four: *ai*, *ei*, *au*, *eu*. The Celtic most distinctly leads back to four diphthongs: *ai*, *oi*, *au*, *iu*. The Lito-Slavonian appears also to have had only four diphthongs before it divided, to which the Slav. *ě*, *i*, *va*, *u*, and the Lith. *ai*, *ei*, and *ẽ* (both=Prus. *ei*) *au*, *ũ*, point back; the Lith. *ui* and Slav. *y* appear to be of later origin. In the Latin and Greek, on the contrary, six diphthongs evidently lie at the base of their system: *ai*, *ei*, *oi*, *au*, *eu*, *ou*. An interesting analogy, although of later origin, occurs between Gaedh. *ia*, *ua*, along with *é*, *ó*, O.H.G. *ia*, *ua* (*ie*, *uo*), along with Goth. *é*, *ó* (Grimm. Gesch. d. d. Spr. 844), and Litfl. *ẽ*, *ũ*, Slav. *ě*, *va* for the guna diphthongs; on the other hand the Kym. *ũ*=Gaedh. *oi* (*oe*) agrees with the Lat. *ũ* for the older *oi* (*oe*).

§. 9. Phonological affinities;—Consonantismus.

In its consonantismus the Celtic connects itself with the Lithuanian and Slavonian in this, that in its older phonetic stage it had no aspirate. The Kymric *ch* is throughout only a sharpening of the spirant *h* for *s*, as in Slavonian, and of similar origin, only that it has not attained the extension of the Slavonic *ch*; the Gaedhelic *f* is a hardening of the initial *v*, the Kymric *f*

(*ff*) is nowhere, as Zeuss thought, a primitive aspirate, but has arisen from *s* or belongs to loan-words (see *Beiträge*, II. 82), only the Gaulish *f* is still obscure. In this respect the Celtic stands in marked contrast to the Greek, with its three aspirates, somewhat less so to the Latin, which to be sure has no aspirates, but whose spirants *f* and *h* rest upon old aspirates. It deviates from the Teutonic inasmuch as the latter has preserved dialectically to the present day an aspirate *th*, and has also *ch* in the Frankish, but it agrees with it therein that, in both languages the aspirates which do occur are all hystero-gens, and rest upon older tenues. Gaedhelic and Teutonic exhibit some agreement in this also, though it is of later origin, that the secondary aspirates have also frequently changed themselves into medials (or medial-aspirates). The change of the old aspirates into medials is common to all European languages, in the Greek occasionally, chiefly after nasals; in the Latin pretty regularly in inlaut; in the others almost without exception; here the Celtic and Teutonic agree best, because sibilants often take the place of old aspirates in the Slavonian and Lithuanian. The Celtic exhibits a remarkable approach to the Teutonic in the occasionally occurring hardening of the medials, as for instance in the root *gen*, where even the Gaulish affords the combinations *Oppianicnos*, *Toutissienos*,⁹¹ in *tenge* (along with Goth. *tuggó*, therefore, for **denge*), in inlaut in *ithim*, *ith*, *cumacc* along with *cumang* (here likewise in accord Lith. *móku*, as opposed to Slav. *moga*), *rofetar* (scio) along with Goth. *vait*=Skr. *vêda*. This looks almost like a beginning of the German protraction of sounds; but on the other hand medials occur instead of tenues in *gabor*, Kymr. *gavar*=Lat. *capere capra*, Teut. **hafar*, in Gaedh. *gabáil*=Cym. *cavael*, Lat. *capere*, Teut. *haffjan*, in Gaul. *ande*-, Gaedh. *ind*- compared with Gr. *ἀντί*, Goth. *and*-, with which the Lith. *gélbėti*=Goth. *hilpan* agrees. The Gaedhelic thickening of the *n* [rather *nn*] into *nd* in certain positions, Z. 54, is decidedly of later origin; it has peculiar analogy to the Goth. *hunds*, N.H.G. *je-mand*, O.H.G. *phant* (=Fr. *pan*). Considering the ignorance which for the moment exists, as to how far phonetic relations may be taken as a measure of relationship, I have meanwhile thought it would be useful to also bring forward such agreements as are of demonstrably later origin, or which might appear in the present discussion of inconsiderable importance.

§. 10. *Affinities of word-formation.*

In word-formation, the suffix *-tion* appears to be exclusively

⁹¹ See Pictet's recently published *Essai sur quelques inscriptions en langue Gauloise*.

Italo-Celtic (the contraction to *-tin* only in Oscan, Umbrian, and Celtic), not much exclusively northern can be opposed to it; the use of *-li* as an infinitive suffix is akin no doubt to the Slavonian *-lŭ* in the participle; it is confined, however, to the single *gabáil* and its compounds. Other suffixes are generally, or pretty generally diffused, such as *-iú* in the feminine abstracts in *e*, *-ti* in the infinitives,⁹² the latter seldomest in Latin. The following seem to have been borrowed: *-aire -ire*=Goth. *-areis*, Slav. *-arŭ*, Lith. *-orius* (from the Latin *-arius*, which appears to have arisen from **-asius*); and *-dóit*=W. 2. *-taut -daut*, 3. *-dawt*, Arm. *dét* (from Lat. *tas*), both chiefly in loan-words (likewise the Kymr. *-es* of the fem.=Romance *issa* from the Greek *-ισσα*, and *-uis* m.=Romance *-ésis* from the Latin *-ensis*). The suffix-combination **-antat*, [rather **-antát*] in O. Gaedh. *-atu, -etu* (Z. 272) is quite peculiar to the Celtic. The Celtic word-formation, however, so far as it is known to us, bears a modern character like that of the Romance; such a heaping-up of suffixes, as is the rule in the known Celtic languages, is a very rare occurrence in the Latin especially. The use of the suffixes has especially much more widely extended itself in composition; while, for instance, an *ἄσπλος ἄνοπλος* sufficed for a Greek, and an *inermis*, at most changed into *inermis* (instead of **inermius*?) for a Roman, the O. Irish, like the Kymric, could scarcely attain in the Greek way (*λόγος, ἄλογος, ἀλογία*) to an *amlabar* (*mutus*)=V. *aflauar*, or W. 2. *anuab* (*ἄτεκνος*), but mostly had recourse to suffixes: *cretem, ancretem, ancretmech* (=belief, unbelief, unbelieving). In general *k* especially has attained a much wider extension than in the Classic languages: already in the Gaedhelic *-ach* plays as a determinative suffix a much more important part than in the Latin (*senex*) and Greek (*γυναικός*), and numerous forms such as *apstallac(h)t, brithemnac(h)t* may be opposed to the single *senectus*; but in the Welsh participles in *-etic* the *-ie* places itself completely by the side of the Slav. *sladŭkŭ*, etc. The Celtic agrees with the Teutonic, especially in the derivation of the verbs in *-aigimn* and *-igur*; while *cumachtagimn, cumachtaigim* still connects itself with *cumachtach*, like the N.H.G. *bemächtige* with *mächtig*; *asmecnugur* (*eradico*), *nomisligur* (*humilio me*) go quite as far beyond the limits as the N.H.G. *peinige, reuige* (In Graff. IV. 3, there are only three such verbs without adjectives: *bimuniğón, chruzigón, tiligón*).

§. 11. Affinities of declension.

As regards the declension, the circumstance which I have

⁹² See ante, pp. 60, 61.

already touched upon in the introduction, namely, that the so-called Pelasgic tongues only have feminine *a*-stems (-*oc*, -*as*), appears to me of importance; the Celtic here agrees with the northern languages. Masculine *a*-stems, which, beside the Latin and Greek, occur also in the Slavonian and Lithuanian, appear to be just as foreign to the Celtic as to the Teutonic: compare, however, Stokes.⁹³ The Celtic has just as few feminine *u*-stems as the Lithuanian,⁹⁴ and at bottom also the Slavonian, whose -*y* (*ŭi*) is transformed into -*ŭvi*, -*vi* and -*va* (Schleicher K. Slav. Formenlehre, 214). On the other hand, it approaches to the Classic languages at least nearer than the Teutonic and Lito-Slavonian in this respect, that it has preserved pure more consonantal stems; it, however, again separates itself from them by the treatment of *s*-stems, and lastly the passage of vocalic stems into consonantal ones seems to be found in Europe exclusively in the Classic languages. The preservation of the ablative, if it were established, would certainly speak strongly for the connection of the Celtic with the Latin; that has, however, as yet by no means been done, and least of all by forms like *innurid*,⁹⁵ whose *d* could not possibly represent a primitive final ablative -*d* or -*t*. (In the opposite case the construction of prepositions with the dative would bring the Celtic close to Teutonic). I cannot lay the same weight as Schleicher does upon the preservation of the *b* in the dative plural; the absence of any contraction in this case rather indeed places the Celtic nearest to Teutonic. But then it approaches the Greek and Latin by the total want of the peculiar pronominal declension, which no doubt, on the other hand, has left evident traces in the Umbrian *PUSME* and *esme*, *esmei*. The agreement between the genitive singular and nominative plural of the masculine *a*-stems in Old Gaedhelic and Latin, appeared to me from the very first extremely remarkable; the deviation of the Oscan and Umbrian from the Latin in both cases on the one hand, and the reappearance of the fundamental form -*ai* in the nominative plural of the Lithuanian and Slavonian, as also the Greek, had, however, hindered me from drawing further conclusions from it, especially as I could never thoroughly convince myself of the correctness of Rosen's interpretation of the Latin genitive -*i* adopted by Bopp. The communication of the old locative forms by Stokes⁹⁶ now to be sure throws a new light upon this genitive also, and makes me more favourable to Bopp's view. To draw further conclusions from so wonderfully exclusive an agreement as that which the Latin exhibits to the

⁹³ Beitr. I. 464.⁹⁵ Beitr. I. 454.⁹⁴ See *ante*, p. 58.⁹⁶ Beitr. I. 334.

Celtic, in opposition to its nearest relatives, remains, however, always attended with uncertainty, because the other agreements in the case-forms (dat. *-iu -u*, voc. *-ě*, acc. pl. *-ús*) recur everywhere except in Teutonic. In the consonantal declension the gen. sing. *-as*, nom. pl. *-is* or *-es*, by the side of the Greek *-ος*, *-ες* (Old Lat. gen. *-os -us*), and in opposition to the Gothic *-is*, *-as*, bring the Celtic phonetically close to the "Pelagic"; but similar points of contact are also found between very remotely related tongues.

§. 12. Affinities of Gradation.

In the gradation or comparison, the Greek isolates itself from the analogy of the other languages by its superlative suffix *-ρατος* (simple *-ρος*, and *ατος* is also, except in numerals, foreign to the others), the Latin by its *-issimus* ($= is + timus$); the Celtic *-am*, *-em* (**-amas*, **imas*) likewise occur only sporadically elsewhere (in prepositional derivatives), its *-imem* nowhere. The Sanskrit, Greek, and Teutonic *-ista*, is wanting in the Latin and Celtic, and every proper superlative suffix in the Lithuanian and Slavonian (except remains like Lith. *pirmas* = Goth. *fruma*). The superlative forms in the Gaedhelic particle-composition *iarm-*, *remi-*, *tairm-*, *tremi-*, correspond to the Lithuanian *pirm*, Goth. *fram* (both used as prepositions and prefixes); *com-* before (vowels and) aspirated consonants, Z. 842, is no doubt a form of the same kind. I have already⁹⁷ mentioned a very significant analogy between the Celtic, Teutonic, and Slavonian, and attempted to explain the Celtic forms,—the double formation of the comparative in Old Gaedhelic *-a* and *-iu* (*-u*), Goth. *-iza* and *ōza*, Slav. *-ii* (*-išzi*) and *-ěi*: a similar relationship appears to exist in the Lithuanian between the comparative (*-ėsnis*, adv. *-jaūs*) and the superlative (*-jausias*, adv. *-jausei*).

§. 13. Affinities of the Pronouns.

The Celtic differs from all its relatives in the pronoun in the giving up of the nominative singular of the first and second person; for *mé*, *me* (cf. Fr. *moi*) is either originally the accusative, or formed from the stem of the oblique cases, and *tú*, *tu*, appears aspirated as a true vocative only in the combination *athusu* (*o tu*), otherwise it resists aspiration, and has accordingly been explained by Stokes as the accusative. But the pronoun of the third person exhibits in the noun *é*, *sí*, *ed*, whose feminine we again find in the Kymr. *hi*, an extremely striking similarity with the Teutonic; this exactly resembles the Gothic *is*, *si*, *ita*, and the retention of *d* in primary auslaut even appears to indicate a

⁹⁷ See *ante*, p. 94.

form **ita*. The accusative feminine *-se* (as the *t* instead of *d* in *inte*, *intesi*, shows) and the accusative plural *-su*, *-siu*, (cf. *intiu* and the almost constant double *r* in *airriu*, *erriu*, *erru*, and constantly in *etarru* and *forru*) correspond to the Old High German *sia* and *sie*, *sio*, *siu*; perhaps indeed the Old Latin forms like *sum*, *sos*, may likewise be here compared, but not in the nom. sing. fem. We only find in the Sanskrit forms corresponding to the genitive *ái*, *á* pl. *añ*;⁹⁸ so likewise to the dative plural *-aib*, *-ib* = **abis* [rather *-abo*] (compare *dáib*, *doib*, *doaibsem* along with 2. *dúib*, *duibsi*, *foraib*, *forib*, along with 2. *foirib*, *fuirib*, *indib* is, on the contrary, common to 2. and 3). The pronoun *ta*, the use of which in its isolated form is foreign to the Latin, otherwise preserved everywhere, appears to be preserved in the dative *uad*, *ood*, f. *uadi*, plur. *uadib*, *uaidib*, the *d* of which cannot be easily explained otherwise, so likewise in *indid*. The pronoun *ana*, which is foreign to the Classic languages, and on the other hand is preserved pure in the Lithuanian *ans*, Slavonic *onŭ*, in the Gothic *jains* with a (hardly merely phonetic) addition, is evidently again found in the Celtic article, although it appears there are in the Gaedhelic forms with a prefixed *s* also (from *sa* ?)

§. 14. Affinities of Conjugation.

But, most remarkable of all is the position of the Celtic with respect to all the cognate languages in the conjugation. Very peculiar combinations and new formations have occurred here, to such an extent that, for instance, the old ending of the first person singular present *-â* (= Lat. *-o*, Gr. *ω*, Lith. *-u*, Goth. *-a*, O.H.G. *-u*, Slav. *-a* for primitive *-*amî*) has been preserved pure only in extremely few Old Irish forms: *bíu* (sum), *táu* (sum), *dogníu* (facio), *déccu* (video), *tiagu* (venio), *tucu*, *tuccu* (intelligo), *roiccu* (indigeo), *toqu* (eligo), and is to be recognized in some others, at least by the umlaut, e. g. *forchun* (praecipio). Again, striking agreements with the Latin occur in the formation of the tenses and the passive. Notwithstanding these circumstances, a wonderful analogy with the Teutonic and Slavonian is found to exist, which points to a most special connection of these languages, the result either of long continued unity, or of a very special relationship of the mind of the peoples. The Old Gaedhelic paradigm completely connects itself with the Lithuanian in this respect, that the present and the praeterite have quite the same endings, not even deviating in the singular, as in the Greek; compare, for instance—

⁹⁸ See *ante*, p. 73.

<i>Pres.</i>	<i>Praet.</i>	<i>i.e.</i>
gniu	ro-gnius	-sû
gní	ro-gnís	-sí
gni	ro-gni	-*sati(?)
gniam	ro-gensam	-*samás
gniith	ro-gensith	-*satis(?)
gniat	ro-gensat	-*santi

The Kymric *-st* of the second person singular praet. has been looked upon as the more primitive form, and compared with the Latin *-isti*, although in the Celtic there is nothing in the plural analogous to Lat. *-istis* (Lottner, Zeitschr. VII. 41); that this explanation does not strictly apply, but rather that the Kym. *-t*, as Pictet⁹⁹ had already surmised, is, as in many other verbal forms, a relic of the pronoun (*e.g.* O. Ir. *carim*, *cairim*), is shown by the corresponding O. Ir. deponential form: *ru-ces-taigser* (disputasti), which has no *-t*, while the third person *ro-labrastar* (locutus est) has preserved the *-t* (*th*), which has frequently disappeared in the present, and always in the praeterite. This seeming agreement may, however, be accidental, even unreal. The Kymric agrees more closely and certainly with the Slavonian, as Schleicher¹⁰⁰ remarked, in the combination of the roots *bhú* + *dhá*; W. 3. *bydaf* = Ch. Slav. *badá*; but in a more general manner there may be also compared the Ch. Slav. *idá* (eo) *jadá* (ascendo), Goth. *iddja* (ivi) and the *-da* in German weak praeterites, *-da-* in the Lithuanian imperfect and present participle. This composition with *-dhá* extends farthest in Slavonian *idá*, and next to it in Welsh *bydaf*, *bydwn*, *byd*; even W. 3. *oedwn* (eram), the *d* of which is wanting in the present *wyf*, also appears to explain itself in the same way, and perhaps even the *awd* in the 3rd per. sing. praet. (Z. 504, frequentissima et omnibus verbis communis terminatio, ita ut in hodierna, lingua eadem (scripta *-odd*) sola pro hac persona in usu sit), though *-awt* in the passive, no doubt, also appears by the side of it. It is particularly remarkable that this *-d* likewise passes over into the root composition peculiar to Kymric (especially Welsh) so that for example in *gwybydy* (scis) three roots occur fused together, *gwyd* + *bu* + *da*, and in *gwnathod* (fecerat), even as many as four, *gwyn* + *ath* + *oe* + *da*. All these agreements in particulars appear insignificant, however, compared to a pervading analogy in the Slavonian, Teutonic, and both branches of the Celtic, which has forced itself from the beginning, on me at least, as one of the strongest proofs of the correlation of these languages.

As is well known, the Slavonian dialects mark the distinction between the imperfect and perfect, continuous and momentary action, which the Greek, Latin, and Romance languages express

⁹⁹ De l'affinité, etc. 150.

¹⁰⁰ Beitr. I. 505.

by special tense-forms, by separate verbs, the composition with prepositions playing therein a great part. Thus, for instance, almost the whole of stem verbs are imperfect in the Polish, but become perfect by composition. What appears strangest to a foreigner is, that the present is wanting in perfect verbs, because the form of the present has assumed a future signification; but we again find the same phenomenon, because it is founded in the idea of the verb, in the Greek εἶμι, whose present has future, whose moods and imperfect, have aoristic signification. That this phenomenon does not, as it at first seems, stand isolated without any analogy in other languages, was shown by Grimm in his introduction to the translation of Wuk's Servian Grammar (l. seq.) and he expressly pointed to a similar distinction in German ("starb" and "verstarb", "ich reise" and "ich verreise morgen"), and also indicated that a still more accurate agreement with the Slavonic might be found in Old German.¹⁰¹ Schleicher¹⁰² has worked this out farther and more accurately, in the first instance only in relation to the future in the Gothic and Slavonian, glancing however at other forms which characterize the Gothic compositum as verbum perfectum. An extremely interesting point with regard to this has been overlooked, namely, the translation of the Greek part. aor. by the part. praes. of compound verbs: *usstandands* ἀναστάς Math. c. ix. v. 9; *gastandands* στάς Mark, c. x. v. 49; *gahausjands* ἀκούσας c. x. v. 41. 47; *ushlaupands* ἀναπηδήσας, *afvairpands* ἀποβαλὼν v. 50, *andhaffands* ἀποκριθεὶς, v. 51, *andbindandans* λύσαντες, c. xi. v. 2, *gataujandan* καταργασάμενον I. Corinth. c. v, v. 3; *samaþ gagaggandam* ἰζῖς συναχθέντων ὑμῶν, c. v. v. 4 (where Massmann, altogether wrongly, and entirely misunderstanding this peculiarity, prints, contrary to the manuscript, *gaggandam*). The whole power to alter the sense here resides in the particle, which, when no other is present, is *ga-*. In New High German, such distinctions as also occur in the passage of Tatian, already quoted by Grimm: *thaz siu bári, inti gibar* (ut pareret, et peperit) have for the most part been obliterated, but sometimes petrified also: thus in the *ge-* of the part. praes., the prototype of which may likewise be found in Gothic, *e. g. fulan gabundanana* πῶλον ἐδεμένον, Mark, c. xi. v. 2. 4.

What herein especially separates the Teutonic and Slavonian from other tongues which have something analogous, is the great force of the particle in composition, and we meet with a perfectly

¹⁰¹ The verbs with a double theme in Greek and Sanskrit offer a somewhat analogous phenomenon, e.g., λαμβάνω imperfect, λαβὼν perfect; compare also the future use of the conj. λάβω in Homer.

¹⁰² Zeitschr. IV. 187 seq.

analogous order of things in the Celtic languages also. In the old languages, wherever another particle (O. Gaedh. *ni*, W. 2. *ed*, 3. *yd*) has not effected its suppression, we also always find the idea of the perfect denoted by a particle, and as in Teutonic by *ga-*, by a special one: *ru-* (*ro*, *ra*, W. 2. *P. re*, W. 3. *ry*, Arm. *ra*), wherein I have already (*infra*, p. 163, with Stokes's concurrence, Beitr. I. 459) conjecturally traced the Sanskrit *pra*. This particle denotes exactly, as in Gothic and Slavonian, the perfect as well as the future, and, just as in German, its use in the modern language is limited and fixed for certain cases. The Celtic deviates in its grammatical form from the Teutonic in this, that its *ru-* remains before or (like the Greek augment) after other prepositions: *ni roimdibed* (non est circumcisis), *immeruidbed* (circumcisis est), while the German *ge-* does not enter into true composition. The reason of this after-position of the *ru-* in Old Irish is obviously this, that here, as in the oldest Greek and Sanskrit, the prepositions remain in perpetual *tnesis* (sit venia verbo!) as the treatment of the so-called infixed pronouns shows: *imm-um-ru-idbed* (circumcisis sum properly: me circumcisum est); forms like *asrobrad* (dictum est) therefore agree perfectly with German ones, such as *ausgesprochen* (in separable composition). The Kymric, which does not actually affix its pronouns after other prepositions, also does not put the *ru-* in the middle, but the Cornish and Armoric deviate therein from the Welsh, that the two former put the pronouns also before *ru-*, the latter allows them to follow.

At the other side of the Channel we find this particle.—Firstly before the præteritum along with the usual sign of the tense: O. Ir. *rorélus* (manifestavi), W. 1. *ro-gulipias* ("olivavit"), 2. *re-briusei* (vulneraverit), P. *re-werthys* (vendi), *re-wresse* (fecerat), so also in the passive before the original participle, in order to denote the perfect: O. Gaedh. *ro-noibad* (sanctificatus est), P. *re thyskas* (instituti sunt), W. 3. *ry echewit* (relicti sunt).

Secondly, before the present and the future (like Gothic *ga-* before the present participle), which are thereby changed into the perfect future exactum: O. Gaedh. *ro-comalnuither* (completum est), *ro-ainmnichte* (denominatum sit), *arnachit-r-indar-piither* (ne sis exheredatus), *ro-beimnis* (fuissemus), *ra-n-glana* (emundaverit se); the treatment of the infinitive in Welsh is extremely interesting in this respect: 2. *e-re kafaél* (se invenisse, properly: suum invenisse), 3. *ry-gaffel* (accepisse), which accurately corresponds to that of the participle in Gothic.

Thirdly, before present forms, especially the conjunctive and secondary present, which acquire thereby a future signification, as *robia*, *robbia*, *ropia* (erit), or, what is analogous to it, conjunc-

tive signification (cf. Gr. ὅπως ποιήσει, also μὴ λάβῃς, along with μὴ λάμβανε, like Latin *ne dixeris*), therefore *coro- corro- conro-* (ut), e.g. *conrochra* (ut amet), *conrogbaid* (ut sumatis), *conrobam* (ut sinus). We only find the second and third methods in Armoric, but here the custom of the language has gradually decided for the use in the conjunctive, which connects itself more especially with the third way. The Gothic also shows all three uses.

The Gaedhelic has only so far passed beyond the limits of the Slavonian and German as to have also given a particle to the tenses of incomplete action, *nu-*, *no-* (explained by Stokes as the Skr. *anú*, Beitr. I. 470), only in simple verbs however, mostly also only to the secondary tenses, seldom to the primary present, and future. I will not even venture to make a surmise as to what the Kymric *yd* (W. 2. ed, P. *y*, Arm. *ez*), which occurs before all tense-forms, signifies, and what may be its origin;¹⁰³ the Gaedhelic *du* (*do*), which we find instead of the *ru* (*ro*), does not differ, probably, from the preposition *du*; *mu* (*mo*) instead of *nu* (*no*) is obscure to me.

The use of the particle before the future and for the future, was perhaps much more extensive in Celtic in ancient times, and has thus probably in part become the cause why the future has disappeared, in Gaedhelic in so many instances, in Kymric almost wholly; at all events, the Celtic is in most beautiful harmony with the Slavonian, and above all with the Gothic, as regards its use of the verbal particles.

At least equally significant analogies of the Celtic to the Teutonic (and in a secondary degree to the Lito-Slavonian) as to the Italic (and further on to the Greek) have then everywhere presented themselves; a kind of middle position will accordingly scarcely be denied to it. It appears, however, as if the phenomena which it has in common with the Teutonic were precisely those which chiefly indicate the intellectual life, the internal character of the language. In this category I include, besides the great extension of the composition with independent words, as well as with suffixes, the twofold formation of the degrees of comparison, and the importance of the verbal particles.

In conclusion, it may be mentioned that a comparative syntax might bring to light many peculiar points of contact between the Celtic and Teutonic, such as the use of the infinitive with *do*, the government of the accusative by *cen* (sine); and that in general, the Celtic, so far as it is known to us, bears in its syntax so decidedly modern a stamp that, to me at least, it is very diffi-

¹⁰³ [The Gaulish *ate*-?]

cult to imagine its connection with the Latin to be so intimate as Schleicher does. In this respect, the Latin evidently bears the most antique stamp, the Greek a much more modern one (for instance, by the freedom in the use of the infinitive and by the use of the article); again, the Lithuanian and Slavonian a much more antique one than the Teutonic; but the most modern of all is the Celtic; so that many things in the Romance languages appear to rest upon Celtic peculiarity. Of this, perhaps, another time.

ON PHONOLOGY IN IRISH.

§. 1. *Necessity of establishing an organic Orthography; and great importance of a comparison of the Modern Irish forms for the purpose.*

SCHLEICHER has justly remarked, that an organic orthography is, above all things, necessary to enable us to get a right knowledge of the Old Irish language. This aim will, no doubt, be only to some extent satisfactorily attained when more extensive and more connected linguistic monuments shall be in our hands than we have at our service on the Continent, and when the editors will strive to attain a greater literal accuracy in their publication, than unfortunately appears to have been hitherto mostly done. Take a few examples in order to show how little, on the whole, one can trust to the literal accuracy of citations:—Zeuss quotes the same word from the same place three times differently spelled, 263 *béisti*, 1009 *bessti*, 1059 *béssti*; O'Donovan gives the following from Cormac's Glossary in two different ways, 292 *tibradaibh*, 360 *tipradaibh*, so likewise 151 *carput*, 252 *carbat*, as dative singular. Fortunately we see, at least in the first case (although we may remain in doubt as to the reading of the codex), by the Middle Irish *ocht m-biasta*, and *na n-ocht m-biast* (Visio Adamnani in O'Donovan 440, 441), as well as from W. 3. *bwystuil*, that the *é* is long, and consequently that *bessti* is wrong, and in both the other examples the *tiprait* of the Leabhar Breac (O'D. 249) and *carpat* in Cormac's Glossary (O'D. 3), as also the Latin loan-word *carpentum*, prove that the true O. Ir. form required two tennes *p* and *t*, which sunk to mediæ only in Middle and Modern Irish,—*tobar* (Keating in O'D. 394) and *carbad*. In *tipra* (or *tipru?*), gen. *tiprat*, an *nt*-stem (Stokes Beitr. I. 457), the *p* appears, however, to have arisen from *b*, by means of the hardening action of an original preceding mute, as in *idpart*, *aedparthi*, and in the examples in Zeuss 80, consequently *ti-* instead of *tid-* as *taith-*, *taid-* (Z. 852) derived from *doait*,¹⁰⁴—Cf. *tid-barid* (offerte) Z. 253.

But we have not everywhere at our disposal similar sources

¹⁰⁴ So likewise probably in *timne n.* (mandatum, præceptum) from *do- aith-mne*

from which to obtain aid in determining the true old form, and where a new and unknown word presents itself to us, we are at present almost helpless. The necessity is then the more pressing for Celtologists to use every available means for fixing the phonetic laws, and establishing an organic orthography. For this purpose the most important of all is the comparison of the Middle and Modern Irish forms, where this is possible; the comparison of the scanty remains of the Gaulish language, which are almost confined to proper names, and the Kymric dialects, are only of secondary importance, and last in order is that of the other Aryan languages.

The Modern Irish is often so strangely disfigured, even in comparison with the Old Irish, and from want of literary cultivation has (like vulgar languages generally) become so very irregular that a direct comparison of its words and forms with those of Sanskrit and the kindred languages would be very daring, and hazardous, in a still higher degree, for instance, than if we were to directly compare the New High German with the Sanskrit. Most of the errors in the first comparative investigation of the Celtic by Pictet and Bopp were due to this cause, and it was only by the publication of old Irish forms in Zeuss' *Grammatica Celtica* that a firm ground was gained and a solid foundation laid for Celtic philology; everything correct that had been found before that time, we must consider as the especially lucky result of a wonderful divinatorial faculty.¹⁰⁵ Who could, for instance, recognize the root *gab* (capere) in the imperatives *fagh* (find) *fág* (leave), *tóg* (raise), the first of which has even a present *faghaim*, without such forms as the infinitives *d'faghbáil*, *d'fághbáil*, *do thóghbáil*, which have still preserved the ending consonants. The O. Ir. forms *fagebtis* (haberent, caperent)—together with *fogbaidetu* (usura)—, *foécbat* (gl. deponant, i. e. relinquunt) Z. 1072, *foracab* (reliquit), *fotrácubussa* (reliqui te), *fácab* (he left) Tir. in O'D. 437, lastly *cotauchbat* Z. 1072, and *cotaocbat* (attollunt se, surgunt) supply the explanation, and the Middle Irish *faghbait*, *faghbat* (they obtain, find) O'D. 241, *foghébha* (thou wilt get) 242, and, on the other hand, *fagbas*, *fagbus* (he leaves), 155, *tóghbaidh* (raise), 180, show the pas-

(root *man*). Cf. *taithminedar*, *taidminedar*, *taidmenader* (significat, memorat) in Z. and Mid. Ir. *timnais* (he bids), in O'D. 155; *damnae* (Tirechan in O'D. 436) appears=*do-mne*.

¹⁰⁵ Unfortunately M. Pictet has again lately (Beiträge, II. 84 sq.) trodden the same dangerous path. I cannot, according to what has been said above, recognize as conclusive, nor yet disprove, the examples which are there to prove the passage of *p* into *f*, so long as the corresponding older forms shall not have been pointed out, and only regret that so highly deserving a scholar does not determine to forsake a way which, I am firmly convinced, is an erroneous one.

sage. The first form contains consequently, one preposition *fo-*, after which the media was aspirated, the other several prepositions *fo- ad-* and *do- fo- od-*, whilst *d* dropped, after it had changed the following media into tenuis, which however again sunk to a media in Middle Irish; the *gh* in *fagh* is, according to this, mere root anlaut, the *g* in *fág* and *tóg*, in which the fusion of several prepositions is also indicated by the length, is the softening of the *e* which has arisen from *dg*. The form *gheibhim* (I find), given as a parallel form to *faghaim*, shows by the aspirated anlaut, which clearly distinguishes it from *gabhaim* (I take), O. Ir. *gabimm-se* (accipio, sumo), the loss of a preposition ending with a vowel, perhaps *fo-*, for *do-* in *an-dorogbid* (gl. donantes), in Z. 1042, produces a different meaning; on the other hand, in *bheirim* (I give), parallel form of *tabhram*, likewise plainly distinguished from *beirim* (I bear), by the anlaut, *do-* appears to have fallen off, for already O. Ir. *dobiur* along with *tabur*, i. e., *do- fo- bur* (*do*) exists. In *deirim* (I say), also, just as in the above-mentioned forms, a *bh* has been dropped, which is still retained in the perfect *dubhras* (Keating—*dubhart*), and is confirmed by the O. Ir. *do-m-ber-som* (quae dicit ille); the imperative *abair* (Mid. Ir. still *apair* O'D. 239), and the so-called conjunctive *go-n-abraim*, on the other hand, contain the same root *ber*¹⁰⁶ combined with another preposition (*aith-* Z. 80) cf. *epiur epur* (dico), *apir* (dicis) *atbeir adbeir epeir epir* (dicit), also *dianaiper* (de quo dicit), Z. 1068, *dian-eprem* (de quo dicimus), and many other forms in Z. to which *nadipru*, *nadipro* (who would not speak), Tir. in O'D. 436, instead of *nad-idbru*, appear also to connect themselves. Less striking disfigurements, but still sufficiently great to warn us of the necessity of extreme caution and moderation in the use of Modern Irish, are, for example, the softening of tenues to mediæ almost everywhere in the inlaut, but even in the anlaut in *gá* (what), *gibé* (whoever), *gach* (each, every), *gan* (without), *go* (to, with), and *go* (that), with the part. verb. *gur*, instead of *cia* (quid?), *cip é*, *cib é* (quicunque), *each* (omnis), *cen* (sine), *co* (ad, cum), *co* (donec, ut) and *coro*; the loss of the initial *f* in *ri* (with), and *ar* (upon), for *fri* (πρός) and *for* (super)¹⁰⁷, which is probably only a continuation and repetition of an older phonetic process, so that a change into

¹⁰⁶ Cf. Skr. *brú*, Zend *mru*, Gr. *φερ* and *φερ* (ἐρέω, ῥήτωρ), Lat. *ver-bum*, Goth. *vaur-d*.

¹⁰⁷ In the Modern Irish *ar*, the two prepositions *ar* and *for* are so mixed up that it is difficult in each particular case to determine which of them we have to deal with; the forms with suffixed pronouns undoubtedly contain *for*, and not *ar*: *orm*, *ort*, *air*, *uirre* or *uirri*, *orraimn*, *orraibh*, *orra*, or *ortha*, as evidently results from a comparison of the Old Irish—*form* (more correctly *formm*), *fort*, *foir*, *fuir*, *fuiri*, *furnn* (Z. 1005) *form forrn*, *foirib fuirib fuirib*, *forru* (c. d. *foraib forib*), on the

f immediately preceded the frequent loss of the *p*, thus for example *patar* may have first changed into *fatar*, and then into *athir*; loss of a vowel in *dá* ("of which", also "which" and "if") for *dian* (from *do-an*, cf. Z. 892), the auslaut of which may still be recognized in the eclipse following; consonantal metathesis in *béarla*, *beurla* for *bélre* (lingua, sermo), for which *bérli* is once found in Z. 9, in *baistim* for *baitsimm* (baptizo), *éistim* for *éitsimm* (ausculto), *easbog* (Mid. Irish *easpog*) for *epscop*, Cornish, *escop* (episcopus).

However necessary in such cases we may find the Old Irish in the elucidation of the Modern Irish forms, and however clearly we may thereby discern the error into which the direct comparison of the latter with those of the other languages might lead us, the comparison of the newer forms is not less instructive and important for correctly understanding the older ones, nay, is often indispensably necessary, and a closer attention to those forms would have saved Zeuss from many errors. As sufficient preliminary investigations have not yet been made to render it possible to give a systematic representation of Irish phonology, I shall only touch in the following pages upon a few points to which my studies have led me.

§. 2. *Vocalismus.*

The most difficult part of the Irish phonetic system to bring to a fixed standard, is the Irish vocalismus, because three kinds of *e* and *o* appear to exist, which do not always admit of being distinguished with certainty, and further, because even the question of the priority of *a* or *o*, *a* or *e*, *u* or *o*, *i* or *e* in individual cases is often beset with insuperable difficulties (at least for the present). In order to indicate graphically the threefold genesis of the *e* and *o* without the use of new type, I propose, firstly, to leave the *e* and *o*, which have arisen directly from *a* without the action of another vowel, unmarked, equally whether they sounded *e* and *o* in Gaulish, or came into existence later by the simple weakening of *a* (perhaps in the auslaut from *é* and *ó*?); secondly, to mark the umlaut caused by *i* and *u* with the sign of shortness, by which we gain at once a sign for original and secondary *i* and *u*, for *ai* and *au*¹⁰⁸ diphthongal and such as arises from umlaut; and lastly, to denote the breaking by *a*, especially

one hand, and *áirium*, *erut-su*, *airi* (the feminine does not occur), *erunn*, *áirib* *airiub-si*, *airriu* *erriu* *erru* on the other. For the only deviating form O'Donovan adduces Middle Irish *forraind*, with which *orrainm* accurately agrees.

¹⁰⁸ Perhaps the most convenient way would be just to write this umlaut everywhere *ai*, *aü*. This mode of marking appears to me to be very convenient for Zend also, in order to distinguish the *ī* and *ū* in *gaīri*, *taūrma*, from the original in *gāus*.

weakenings from *i* and *u* by *ē* and *ō*, the former to be understood completely in the sense of the M. H. G. *ē*, the latter, however, in the opposite sense of *ō* in O. Norse.

Examples: 1. O. Celtic *e* in *ech* (equus), Gaul. *epo-*, W. 3. *ebawl*, V. *ebol* (pullus); *breth* (judicium), Gaul. *vergo-bretus*; *nert* (virtus), Gaul. *Nerto-marus*, *Esn-nertus*, W. C. *nerth*, Arm. *nerz*; *nemed* i. e. *nemedh* (sacellum), Gaul. *νεμετον* i. e. *νεμετον*, *Vernemetis*, W. 2. *neuat*, 3. *neuad* (aula); O. Celtic *o* in *orcaid* (occidit), *orcas* (qui occidit), i. e. *org-*, Gaul. *Orgeto-rix*, W. 1. *orgiat* (caesor); *ocht* (octo), Gaul. *Octo-durus*, W. 2. *uith*, 3. *wyth*;—2, umlaut by *i*—*aīth-*, *aīd-*, *ēd-*, *īth-*, *īd-*, Gaul. *ate-*, Kymr. *at-*, *et-* (perhaps also W. 2 *ed-*, *e-*, 3. *yd-*, *y-*, P. *y-*, Arm. *ez-*, *e-*, the verbal particle, = Skr. *ati* ?); *aīr-*, *ēr-*, *īr-*, Gaul. *are-*, Kymr. *ar-*; *ērbaid* (committit), *ērbīd* (tradite), root *arb*; umlaut by *u*—*rolaūmur*, *rolōmor* (audeo)—more frequently *aī* (*ōī*) and *aū*—*baīll*, *boīll*, *baīll*, *baūllu*, *bāllu*; 3. breaking of *i*—*ētha*, *bētha*, *ētal*, *cēnn*, *tuisēl*; breaking of *u*—*mōga*, *lōth* (lutum), *crōchad*; simple weakening perhaps in *fēlsub*, *crōch*, *dōmun* (Gaul. *dumno-*)? In order to distinguish *ia*=*ē* and *ua*=*ō* from contracted *ia* and *ua*, I mark the former with the grave accent on *a*—e. g., *biad*, (victus, esca) from **bivatha* (βίωτος), hence gen. *biith* *biid*, Mod. Ir. *bīdh*, on the other hand, *dià* (deus), from **dēva*, gen. *dēī*, *dé*, so also *uàthath*, *uàthad* (singularis)=*óthad*.

Even though it be established that the *a* in Mid. Irish *mara* (maris), *maīnstrech* (monasterii) is corrupted from the *o* of O. Irish *mora*, *monīstre* (monasteriorum), and the same observation very probably applies to the Mid. and Mod. Ir. *a* of many endings (e. g., part. pass. in *-ta*, O. Ir. *te*) as compared with O. Ir. *ē*, we cannot thence by any means conclude that this is everywhere the case; thus, for instance, that in the gen. sing. *bētho* (mundi), we have an older form than *bētha*¹⁰⁹, in *aecaīllse*, an older form than *aecolsa* (ecclesiae). The Mod. Ir. affords us little help in this investigation, because the uncertainty of the O. Ir. orthography (which, for example, leaves the umlaut of the *a* by *i* at one time unmarked, and at other times writes it *ai*, *oi*, *ui*, *e*, *i*, and even *ae* and *ói*) is not only in great part retained here (leaving out of consideration the action of the well known rule—*caol le caol, leathan le leathan*—a rule which, however, in its turn acts disturbingly), but also by arbitrarily confounding the simple vowels, has reached so great an extension that almost any short vowel may stand for every other. Thus *a* is found for *u* in *chugam* for *cuccumm* (ad me) in the acc. pl. *chuca* for *cuccu* (ad eos) as in Middle Irish already; *a* for *i* especially before *n* (ana-

¹⁰⁹ Although Mr. Stokes, in his valuable Irish Glosses, p. 159, appeals for it to the ogamic gen. *Atilogdo* or *Apilogdo*.

logous to the French pronunciation of *en*=Lat. *in*, in *dans*=de intus, *sanglier*=singularis even written), in the article *an*=*ind*, *ant*=*int*¹¹⁰, in the preposition *a(n)*=*in*, in the interrogative particle *an(n)*=*in*, while the prefix *in-* or *ion-* has preserved the *i* of the old *ind-* in *colann* (a body)=*colinn* (caro); even *u* for *i* in the preposition *um*=*imm* (also with suffixes *umam*, etc.); *o* for *e* in *romam*, etc., *roimpe*=*remi*. In spite of this confusion in the elements, which for the eye is considerably increased by the well known rule according to which *féar* is written for *fēr* (gramen), *fear* for *fēr* (vir), *féarr* for *ferr* (melior), even *neoch*, *noch* for *nech* (qui, properly aliquis), the Modern Irish comes to our aid even in the vocalismus, whenever we have to do with the explanation and origin of true or apparent diphthongs. The O. Ir. *ai* has, for example, a threefold meaning, as a true diphthong, as umlaut from *á*, and as umlaut from *a*; the usual mode of marking these in MSS. is not sufficient to properly separate these three sounds according to their different origin, the diphthong appearing at one time with, and at another without, an accent, being consequently not sufficiently distinguished from either the short or the long umlaut. (In the marking of the umlaut by *aĩ* and *ái* above proposed, the accent for the diphthong *ai* may be dispensed with). The parallel forms also (*oi*, *aě*, *oě*, for the diphthong, *ě*, *ĩ* for the umlaut *aĩ*, *ái* without umlaut for *ái*) do not give full security, for *ae* is sometimes found for *ě*, namely in anlauts and auslauts, and *ái* and *oi* sometimes for the umlaut *aĩ*, especially before liquids (Zeuss, 32). But if we compare Mod. Irish, the diphthong *ai*, *aě* appears transformed into *ao* (or its umlaut *aoi*): *caora*=*caira* (ovis), *caoin*=*cáin* (bonus), *gaoth* (already Mid. Ir.)=*gáith gáid* (ventus), *maoin* (wealth)=O. Ir. pl. *maini* (opes, pretiosa, dona), *saobh* (bad, evil)=*sáib*, *sáeb*, *sóib soeb* (falsus), *saoghal* (world)=*saigul*, *maor* (steward)=Mid. Ir. *maer*; the umlauts, on the other hand, have remained unchanged, *maith* (bonus), *ainm*=*aĩmmm* (nomen), *ainsear*=*aĩmsēr* (tempus), *cailleach* (a hag)=*caĩllēch* (anus, monacha), *gabháil*=*gabáil* (sumptio), except that, as already in O. Irish, *oi* frequently occurs for *aĩ*, and seldomer *ei*—*coill* (wood)=*caĩll* (silva), *cloinne*=*cláinne* (prolis), *anoir*=*anaĩr* (easterly), *eile oile*=*aĩle* (alius). The Modern Irish does not suffice, however, to distinguish *ai* and *oi*, for it expresses both by *ao* (*aoi*) e. g., *aon* (unus)=*oĩn oin*, *caol*=*cóil* (macer), *coaga*=*cóica* (quingenta)—*cúig*=*cóic* (quinque), is remarkable. The Kymric dialects which have retained the *ai*, *aě*, as for instance the Welsh, but change *oi*, *oě* into *u* (with few, perhaps, apparent exceptions),

¹¹⁰ The explanation of the newer form which I have attempted at p. 88, is incorrect, because this phonetic peculiarity of the Modern Irish had escaped me.

e.g., *úin* = Irish *oīn*, may be here appealed to. Umlaut *aū* and diphthong *au* (*áu*, *ōu*, *áō*, *ó*) appear to be less sharply distinguished, as the former is replaced by *u* or *o*, and the latter by *ó* or *ú*, which is sometimes shortened, or its length is not marked, cf. *auē* (*nepos*) and *o ua*, *auḡtortás* (*auctoritas*), and *ughdar*, pronounced *údar* (*auctor*); the inorganic *aū* instead of *ā* in *aūd*-, *aūr*· (Z. 7. 8) does not occur at all in Modern Irish.

§. 3. Consonantismus—Aspiration of *Mediæ* after Vowels.

The comparison of the newer forms yields us much more important service in the consonants. Thus, for instance, at p. 119, a form *se* (already proposed by Stokes, Beiträge I. 450) for the acc. fem. *siu* for the acc. pl. was deduced from *intē* (in eam), *intiu* (in eos), *aīriū* (propter eos); *ētarru* (inter eos), *forru* (super eos), and the Modern Irish which has only preserved the dative after *di* and *do* (*díobh*, *dóibh*), but otherwise puts the accusative everywhere, offers proofs in abundance which confirm this conclusion. The *s* of *se* and *siu*, *su* is preserved in *tháirse*, *tháirsi* (over her) and *thársa* (over them); it has changed into *t* after *s* in the secondary form *thársta* and in *aiste*, *-ti* (out of her), *asta* (out of them), likewise in *uaiste*, *-ti* (above her), *uasta* (above them), in which consequently *s* or *st* is to be considered as originally *ss* (the original auslaut of *tar(s)* is perhaps still to be recognized in the *rr* of *thorrainn*, *thorraibh*, *-orrainn*, *orraibh* from *for* occur also, however, and the O. Ir. *torunn* has single *r*); *th* for *s* after vocalic auslaut in *fúithe*, *-thi* (under her) and *fútha* (under them), *uaithe*, *-thi* (from her), and *uatha* (from them), *trithe*, *thi* (through her) and *tríotha* (through them), similarly after *r* in the secondary form *ortha*; *rr* for *rs* in *uirre*, *-ri* (on her), *orra* (on them), *eatorra* (between them) where at the same time the depressed tenuis in *eidir* is preserved; original tenuis preserved by *s* in *aice*, *-i* (with her) and *aca* (with them), *chuice*, *-i* (unto her), and *chuca* (unto them), while *aige* (with him) and *chuige* (unto him), prove vocal anlaut by the media; tenuis after nasals derived from an original media in *uimpe*, *-i* (about her), *umpá* about them, from a secondary one (?) in *inn̄te*, *-i* (in her), *ion̄nta* (in them), directly intercalated in *roimpe*, *-i* (before her) and *rompa* (before them), on the other hand *roime* (before him). All these examples are in the highest degree important and interesting by the constancy with which the *s*, which has elsewhere generally disappeared, makes its influence still left in the latest language period, and most strikingly of all in *roimpe* (for *roimsi* the *p* as in Lat. *dempsī*, *demptum*) along with *roime* with aspirated *m*.

But we especially want very often the Modern Irish to deter-

mine whether tenuis or media is to be read aspirated or not. As is well known, the oldest documents do not always very accurately mark the aspiration even in *tenuis*, still less in the case of *f* and *s*, and not at all as a rule in the case of *mediæ* and *m*, or at most mark the unaspirated pronunciation by duplication, and in the MSS. of Zeuss, wherever the aspiration is indicated, the aspirated *tenuis* is found for the *media*. Thence arises a double ambiguity, inasmuch as we may fluctuate equally between *d* and *dh* as between *dh* and *th*; but this ambiguity is still further increased by the circumstance that *tenuis* not only occurs for double *media*, but also inversely *media* here and there for pure *tenuis*. As the Middle Irish MSS. also do not always accurately mark the aspiration of the *media*, it is often only the Modern Irish which can here help us, for the latter, in spite of the above mentioned corruption, has, by completely dropping aspirated consonants, and a wide spread lowering of pure as well as aspirated *tenuis*, fortunately maintained accurately, on the whole, the limits between aspiration and pure pronunciation, with the exception of some verbal forms before which particles have dropped, and some particles whose anlaut is aspirated as, *cheana* (already), *bleos*, *fós* (yet) for *cene* (jam), *beos* (adhuc), *co* and *tar* in the formulae *chugam*, *thorm* (cf. above.)

The simple *m* which in O. Irish is not protected by consonants, becomes always aspirated in Modern Irish; **dōmaīn* in *fudumaīn*, *fudōmaīn* (*profundus*) becomes *doimīn* (although the second vowel was probably intercalated here merely to ease the pronunciation on the dropping of the O. Irish ending), and this *m* has likewise (even in Middle Irish) frequently taken the place of an original *bh* as in *naom* instead of *noib* (*sanctus*), *neam-*, *neim-* instead of *neb-* (negative prefix), *claidhem* instead of *clāideb* (*gladius*), *fealsam* instead of *felsub*, which has in consequence followed the false analogy of *brithēm*. We may, therefore, with perfect security deduce from *m* in inlaut in Modern Irish, *m̄* or *mm* (*mb*) in Old Irish, which to be sure we are not as yet always able to explain; thus *anam* points back to *animm* (*anima*) Z. 1059, *ainm* to *ainm̄* (*nomen*), *uaim* to *uaimm* (*a me*), etc., as *im*, *uim*, *um*, does to *imm* (*imb*)¹¹¹ while *dom* has become *dam* (*to me*), *rem roim* (*before*).

An original *media* after vowels is always aspirated in Modern

¹¹¹ As in *imm* from *mb*, so may the *m = m̄* in *Cormac* (for organic *Corpimaquas*, where the vowel dropped should produce aspiration) have been assimilated from *pm*, in *anmi* (*sumus*) from *sm*; in *animm*, *ainm̄*, *uaimm* it is just as unsatisfactorily explained as in 1 sg. and pl. of the verb; and singularly enough the Kymric shows just here a softening, V. *enef* Arm. *enef*, *eneff*, (*anima*), W. 3. *enw*. P. (*hanow*, Arm. *hanu* (*nomen*), W. 3. *ohonaf*, *ahanaff* (*a me*, *de me*), just as in

Irish, *adharc*, *brígha*, *buidhe*, *croidhe*, *a n-deaghaidh*, *foghlaím*, *adhradh*, gen. *adhartha*; therefore, no doubt, to be thus represented in Old Irish: *adarc* (cornu), *bráge* (cervix), *buīdē* (flavus), *crīdé* (cor), *indegaīd-ū* (post), *foglaīm* (comprehensio), *adrad* (adoratio). The change between aspirated *tenuēs* and *mediæ* also points in the same direction; the final med. asp. is a softening from *ten.* asp. in *adrad* (probably also in *indegaīd*) as frequently happens, cf. *cailleach*, Old Ir. *caillēch*, gen. *caillighe*. After consonants the *mediæ* in Modern Irish also remain without aspiration, except where a vowel has dropped out, *árd*, *fearg*, *boly*, *borb*, O. Ir.—*ardd* (altus), *ferc* for *fergg* (ira), *bole* = *bōlgg* (bulga), *borp*, i.e. *bōrb* (stultus); Stokes (Beiträge II. 102) has, therefore, rightly looked upon such forms as *dealbh*, *marbh*, *tarbh*, where the *mediæ* appear aspirated after liquids, as proving *bh* = *v*.¹¹²

On the other hand, the *mediæ* are often assimilated after liquids, especially after *m* and *n* [as partly already in O. Irish, *uáll* (superbia), gen. *uáilbe*], thus in *agallam* = *acaldam*, *accaldam*, *acaltam*, i.e., *acalldam* (allocutio), *iomad* Corm. Glos. (many) = *imbed* (copia, ops), *ionam* = *indiumm* (in me), *binn* (inelodious) = *bind*, *clann* = *cland* (proles), *cunradh*, Mid. Ir. *cundradh* (a covenant), O. Ir. *cundrad* (merx), *connarcas* (I saw), for *cond.* (root *dare* in *δέρω*, etc.), *coinneal* (a candle), cf. *caín-dlóir* (candelarius), even Middle Irish *bennacht*, *bennachadh* = *bendacht*, *bendachad* (benedictio) likewise *mallacht* = *maldacht* (maledictio).

The so-called eclipse also depends upon the assimilation, so far as it affects *mediæ*, inasmuch as *na-m-ball* (membrorum) is pronounced *nammall*. I suspect, therefore, that in O. Irish also the dot over *n̈* and *m̈* before *mediæ* had more to do with the media than with the nasal, and consequently that *rad n̈idé* is to be pronounced *rad né* (notwithstanding the apparently contradictory mode of writing *freccaire*, *dofoirde*), because nasals otherwise regularly drop out before *tenuēs*, but not before *mediæ*, or rather remain when *tenuis* becomes media, as in *ind-* (Gaul. *ande-*), *ingor* (Lat. *ancora*). Another assimilation according to which *codhladh* (sleep), *céadna* (the same), *colna* (of the flesh), are pronounced *colladh*, *céana*, *colla*, is not indicated in writing.

§. 4. Consonantismus—Aspiration of *Tenuēs* after Vowels.

The original *tenuēs* (and the hard spirants *s*, *f*) like the *mediæ*, are always aspirated in true Celtic words after vowels, if

1 sg. -*af*, while although an Arm. *dif*, *diff* corresponds to the Irish *dom*, *dam*, we have on the other hand W. 3. *im*, *ym*, P. *thym*. From this it appears that the *nm* in these cases is exactly comparable with the *nn* of the article, and was perhaps produced under the influence of the original accent.

¹¹² *Derbh* (certus) along with *dearbh* is very curious, so likewise is *easbha* (defect), pl. gen. *easbhadh*, cf. acc. *tesbaíd* (defectum), dat. *tesbaíth*.

a vowel or liquid follows, but not before mutes, except in the combination *et*, which is sometimes written *cht*, also, as it appears, not before (dropped) *v*; and in this the Modern Irish has altered nothing, except that it has logically carried out the *cht*; with oscillation in Old Irish of aspirated tenuous to mediae, especially in *th*, less so in *ch*, in which latter in Modern Irish it has much more extensively spread. After consonants (as before mutes) tenuis remains without aspiration, also after those which have dropped out, hence *t*, *c*, instead of *nt*, *nc* (likewise *f*, *s*, instead of *nf*, *ns*); but Modern Irish has here frequently lowered the tenuis to media, both original and secondary.

The old Irish has changed organic mediae into tenuous in two ways: 1. before dropped vowels, by which the media has to a certain extent passed into auslaut, and thus become hardened to tenuis, for example in *táirci* (efficit) from *do-áirci*, in the compound prefixes *int-* from *in-do-*, *taír-* from *do-air-* (*d'air-*) *taíth-* from *do-aíth-*, *tes-* from *do-es-*, *tiar-* from *do-iar-*, *timn-* from *do-imm-*, *tin-* from *do-in-*, *tind-* from *do-ind-*, the same with the dropping of an *f* in *tú*, *tó-* from *do-fu-*, *do-fo-*, in *tor-*, *tór-* (*tuar-*, *tur-*, *ter-*) from *do-fór*, with the dropping of an *s* in *intsamail*, *intslücht*, in the article *int-* from *ind-s-*, and in the abovementioned prepositions with suffixed pronouns; 2. by the collision of two mutes, in which the first, if it was a media, became on that account hardened, and then induced the hardening of the second, just as if it was an original tenuis or aspirate, *atomaig* from *ad-dom-aig*, *cotondelecfam* from *cot-doñ-delecfam* (*cot-* according to Stokes, Beiträge II. 106 = Welsh *cant-*), *frítammiurat* from *fríth-damm-iurat*, and others given by Zeuss, 336, *ēdpart*, *īdpart* from *aíth-bart*, but has then generally been dropped, or more correctly has assimilated itself (for gemination often remains unexpressed in O. Irish, and in the case of consonants capable of aspiration, always in Modern Irish, only *ll*, *nn*, *rr* are written), thus in *acaldam accaldam* (allocutio) from *ad-gal-dam*¹¹³ (pronounced *atgaldam*, *atcaldam*), *ēpīl* (perit) along with *atbail* Z. 1012 (pronounced *atpail*) from *aíth-bail*, *ēcne* (cognita) along with *āidgne aíth-gne*, *freere* (responsum) from *fríth-g(a)re*, *conucbad* (ut attolleret) from *conuad-gabad*, *doopīr* (privat, aufert) from *do-od-bīr*.

In the first case the Modern Irish preserves the tenuis which is thus produced, *e.g.* in *tim-*, in the article *ant* and in the above examples of prepositions with pronouns; in the second it allows

¹¹³ Cf. *adgládur* (προσαγορεύω), *adgládathar* (appellatur); so also *comalnad* (impletio) along with *lān* (plenus). The abovementioned hardening is also, no doubt, the reason for the mode of writing *gg*, *dd*, *bb*, for *c*, *t*, *p*.

the same tenuis (the second mute) to again sink to a media, but does not aspirate it, *e.g.*, *iodhbairt* (an offering) = *idpaírt*, *agallain* (a dialogue) = *acaldam*, *ei-blin* (I die), likewise **éplínm*, *eagna* (wisdom) = *čene* (sapientia), *admuim* (I confess) cf. *ataimēt* (profidentur) from *ad-daīmēt*; both united show themselves in the abovementioned *tógbhaim*, where the *t* of *tócbāim* from *do-fo-od-g* has remained, but the *c* has sunk to *g*. It has likewise changed the original tenses, to which (*n*)*t* and *t*(*v*) consequently belong, everywhere into mediæ after vowels: *codladh* (sleep) = *cotlad* (somnus) dat. *cotlād*, Z., 822, *fad* = *füt* (longitudo), *céad* = *cét* (centum), *céadna* (the same) = *cétne* (primus), *creidim* = *cretim* (credo), sometimes even geminated ones as, for instance, *clog* = *clocc* (*clocca*), *beag* (little) = *becc bee* (parvus, paucum), along with these there are however *mac* = *macc* (filius), *enoc* (a hill) = *enocce* (gibber, ulcer), also *cruid* (a harp) = *crot*, i. e., *crott* (crotta), *breac* (a trout), gen. *bric*, which points to **brece* (cf. N.H.G. *bricke*); *trócaíre* (misericordia) from *tróg-caíre* (amor miseri) also remains unchanged. Fluctuations occur here after consonants; after *s* generally softening; less frequently and more properly in Gaelic after *ch* (after *gh*,—*ughdar*, O. Irish *augtortás*); after *l* and *r* the tenuis is preserved—*ole*, *mare*, *neart*, *falt*, *corp*; but *p* often passes into *b* after *l*¹¹⁴ [*Alpa*, gen. *Alpan* Cormac's Gloss. in O'Don. 3. 354 (Scotland), acc. *Alpaí-n* (Alpes) Z. 616, from which *cenalpande* (cisalpinus), therefore properly "highland", has become *Alba*, already Middle Irish gen. *Alban* in O'Don. 83, dat. *Albain* 251], less frequently after *r* (yet *carbad* = *carpat*), *t* remains also after *n* in *muintir*, *muintear*, but *c* passes into *g*—*rángas* (I reached), *thángas* (I came), in Middle Irish still *ránca-tar* (they reached), O'Don. 246, *táncamar* (we have come), 252.

It is evident that the so-called eclipse of the tenuis, and of *f*, which sinks to *bh* under similar conditions, (strictly speaking no eclipse can be spoken of in the case of *s*, as the *t* before it belongs to the article, otherwise we would be obliged to consider the *p* of *umpa* to belong to the eclipse) also depends upon this sinking to mediæ, and has properly nothing whatever to do with the nasal, which is generally dropped before it. Just as in the middle the tenuis has changed into a media indifferently, whether a nasal has fallen out before it or not, as *cét*, *étar* become *céad*, *eidir*, exactly as *bee* becomes *beag*, the former is, however, accidentally the more frequent, so in the anlaut, under certain conditions, every tenuis not protected by consonants also passes into a media, and it is a simple accident that in most cases a nasal originally preceded, and that consequently, as a rule, the funda-

¹¹⁴ Probably the *bh* in *dearbh*, *easbha* may be thence explained; see note 112, p. 142.

mentally different eclipses of the *tenuis* and *mediæ* go hand in hand; that this is not a necessary condition is shown by the eclipse after *éa-*, *éi-* (O. Ir. *é-* along with *es-*, like Lat. *e* along with *ex*), which only occurs with *tenuis*, *éageóir* (injustice) = *écóir* (incongruus), *éadtrom* (light) = *étrum* (levis), not with *mediæ*, *eadoimín* (shallow), because no nasal is present.

From what has been said above, we may consequently conclude with perfect safety that Modern Irish *tenuis* corresponds to O. Irish *tenuis*, Modern Irish *dura* to O. Irish *dura*, on the other hand aspirates to aspirates with exceptions, Modern Irish *mediæ* to Old Irish *mediæ* only if aspirated, or in the combinations *rd*, *lg*, *rg* (*ld* and *nd* have been assimilated to *ll*, *nn*), while after vowels, *s* and *ch* every pure *mediæ* points to an old *tenuis*, after *l* and *r* at least *b* is of uncertain origin. We may therefore infer from *árd ardd* (*sublimis*)—written *ardd*, *art*, *ard*, from *fearg fergg*—written *fere*, from *bolg bolgg*—also written *bole*, likewise from *agallain accalddam*—written *acaldam* and *acaltam*, from *binn bindd*; on the other hand *borb* would not lead with certainty to *börbb*, if we did not find *burbē* written along with *burpē*. The circumstance that *dura* point back to *dura* will, however, be of especial use to us in the case of dentals, for the purpose of getting rid of some errors into which Zeuss has fallen in several passages of his grammar, in consequence of having neglected the newer forms.

§. 5. *Consonantismus*—Cases which afford occasion for Aspiration after a preserved or lost Vowel: (I.) in *Inlaut*; (II.) in *Anlaut*; (III.) in *Syntax*.

As is well known, the same laws which govern aspirations after vowels, apply in general to those cases also where vowels had originally existed, but dropped out, so that we may infer from the appearance of aspiration the former presence of a vowel in *inlaut* as in *anlaut*; if, therefore, for example, *s* before mutes, (according to O'Don., also before *m*, cf. *fösmachtu*, Z. 666, consequently before consonants capable of aspiration generally) be not infected by preceding vowels, as the mode of writing *tesst* shows, a *doinscann-som*, *intinnscana* (incipit) from *do-ind-sc.*, *indo-ind-sc.*, will stand opposed perfectly according to rule to the *intsamul*, *intslücht* from *ind's*. The aspiration rule is, however, subject to so many exceptions in this case, inasmuch as it also depends upon the nature of the preceding consonants, that in the uncertainty of the ancient orthography we can only attain safe results by a comparison of all individual cases with constant reference to Modern Irish.

Such cases as afford occasion for aspiration by a preserved or lost vowel, belong essentially to three categories:

(I.) *In Inlaut.* In the inlaut of a word before, and in the derivative or flexional endings, especially in the word-forming suffixes *-ath*, *-ēth*, *-uth*, *-id*, *-ach*, *-ēch*, *-ithē* (*-īdē*), and before the *-t* (*th*, *d*) of different conjugational endings. In all these cases occasion also often occurs for the dropping of a vowel in inflexion and derivation, and Zeuss (page 84, with which the examples 762 *seq.* may be compared) has correctly remarked that "the *t* of the ending is not aspirated after *l*, *n*, *s*, and that a *tt* (or *t*) arises from *t-t*, *th-t*".

The following examples are from the conjugation: *con-festa* (ut scias), *marufeste marrufeste* (si sciretis), *condigēnte* (faceretis), *nígette* (Z. 264, "non faceretis"?), *conrochretesi* (concrederetis), *connáruchretesi* (ne crederetis)—with *t* for *tt*—along with *niscartha* (non abesses), *nongabthe* (q. sumebatis), fut. secund. *folnibthe* Z. 454; deponentials—*rofestar* (scit) *nifíastar* (nescit), *miàstar* (judicat) and the preterites in *-astar*, *-istir*, *-ēstar*; passive forms—*arna furastar* (ne fuscetur), *samaltir* (comparatur), *adcomaltar* (conjungitur), *donelltar* (q. declinatur), *maniréltar* (nisi manifestatur), *frisdíntar* (obstruitur), *asagnintar* (significatur), *gentar*, *do-géntar* (fit, fiet), *nomglantar* („emungor”) *nonlintarni* (implemur), *nonnertarni* (q. confortamur) for *tt*, *conintorgúitar* (ut non circumveniamur) and *honuntogaitarni* (ex quo fraudamur), *sluántir* (significatur) with *t* for *dt*, on the other hand *derbthair*, *scribthar* *dínaithtir*, *cairíghthir*, *lobríghthir*, *súidighthir*, *intoichthar*, *indtuíghthar*, *arosaílethar*, *a-carthar*, *itarsearthar*, *anasberthar*, *asrirthar*, *fristacuirthar*, *berthir* (differently *nomthachtar* („angor”) and *génthir*, Z. 470!); preterites—*dorúnta* (facta sunt), *asrúnta* (inquinata sunt) along with *dorurgabtha* (prolata sunt); secondary tenses—*nolíntae* (solebat repleti), *conulíntae* (ut compleretur) along with *arna eperthe*, *doberrthe*, *roberrthe*, *uocrochthe*, *na ructhae*; past participles—*acomallte* *acomoltae* (conjunctus), *comchlante* (conseminatus) with *t* for *dt*, *remfoiti* (praemissi) so also *dlútaí* acc. pl. (fixa) 1015 for *thí.*, *forbanda* (secta) 845 with *d* after *n*. On the other hand, *remeperthe*, *sulbaírichthe*, *aídhúimthe*, *loísethe*, *aírgabtha*, (*timmortē* is curious with the *e* dropped as in the preterite *dobímhchomartt*, further *indibthe* (circumcisis) and *foírethe* (eruditus)¹¹⁵ where, after the loss of the *n* of *ben-* and *can-*, we should expect uninfected *t*, *forngarti* (jussi) appears like *timmortē* to be formed without a copulative vowel); future participle—*eclustai*, *sastai*, *imcasti*, *aíríllti*, *dénti*, *forcaínti*, *cocaínti*, for *cocaínti* (emendandum), in opposition to *eperthi*, *imcabthi*, (*aíchti* is curious!). The whole of the examples, with the exception of the evidently

¹¹⁵ *Indibthe* and *foírethe* may be compared with Sanskrit and Greek forms, such as *hata*, *φάρος*, from *han*, *φειν*.

corrupt *génthir*, confirms throughout the observation of Zeuss; the omission of the aspiration takes place only after *l, n, s, d, t, th*, in opposition with *crochthe*, among others, except in the case of *nom-thaacthar* and *aichti* (*timmorté* and *forngarti* may be explained in this way, that these verbs go in accordance with series III. of Zeuss); it is therefore singular that O'Donovan, in the rule for the Modern Irish passive and participles, puts *tenuis* after all aspirates *ch, gh, th, dh* (others do not here occur), except in the verbs in *-ighim*, as well as after *l, ll, n, nn, s*, while, on the other hand, he puts the aspirate after *d* and *t*. He at the same time admits, however, that the sound remains the same after *d* and *t*, whether we write *t* or *th*. This rule also receives no confirmation otherwise, inasmuch as *t* is everywhere found in derivation and flexion both in Old and Modern Irish after *l, n, s, t, d, th, dh* (only with softening in *d* after *n*, seldomer after *l*), on the other hand *th* appears equally constant after *ch, gh*, as after all other mutes.

The suffix *-tu* masc., *-atu, -itu* (cf. Beitr. II. 81), seldomer *-ti*, especially affords us examples from the declension, as it is usually affixed without a copulative (hence *tabairt, epert*): gen. *pectha pectho*, nom. plur. *pecthi, pecthe, pectha*, gen. *pecthe*, dat. *pecthib*, acc. *pecthu* (*pectha* Z. 1003) from *peccad* (i.e. *peccáth*), gen. *cröchtho* from *cröchad*, *étarseartha* from *étarsecarad*, *cúrsagtha* from *cúrsagad*, *dúnigthēa* from *dánigūd*, *foilsichtho indfoilsigthe* from *foilsigūd*, *incholnūichtho incholnūigthēa* from *incholnūigūd*, *intsechtaigtha* (read *ints.*) from *sechtaigūd*, *sulbaíríchthe* Z. 618 from *sulbaírīgūd*; gen. *iarfaichthēo iarfaigtho*, dat. pl. *iarfaigthib* Z. 1070 from *iarfaigūd*, *iarfigūd* f., dat. pl., *debtuib* from *debuith*; on the other hand, gen. *rélto* from *rélath*, *rélad* (manifestatio), *ind-aërchoiltēa* from *ērchoilūd* (definitio), *cēsta cēsto* from *cēsath cēsad* (passio), *nerta* from *nertad* (exhortatio), *taírmchrutto* from **taírmchruthad* (transformatio), gen. *dag-imráta, drog-imráto* (it is to be read thus), nom. pl. *imbráti imráti*, acc. *imrátiū*, (Z. 1068), from *imbrádud imrádud* (cogitatio).¹¹⁶ Here also *t* remains after *l, n, s*, and dental mutes, but is aspirated after all other consonants, and the Modern Irish confirms this by the plurals *sgéalta, seólta, ceólta, néalta, bailte, coillte, aitheanta, léinte, teinnite, linnite, cluainte, móinte, túinte, cointe, bróinte*, and the genitives *ionganta, tionnsganta, cosanta, déanta* from *sgéal* (a story), *seól* (a sail), *ceól* (music), *néal* (a cloud), *baile* (a town), *coill* (a wood), *aithne* (a commandment), *léine* (a shirt), *teinne* (fire), *linn* (a pool), *cluain* (a meadow), *móin* (a bog), *túin* (a flock), *cu* (a greyhound), *bró* (a quern), *iongnadh* (wonder),

¹¹⁶ Zeuss, 851, erroneously assumes a nominative *dagimrat*. Stokes (Beiträge I. 450) also is in error respecting *taírmchrutto* (*crochta* appears to be careless writing).

tionnsqnadh (beginning), *cosnadh* (defence), *déanadh* (doing), in opposition to the plurals *mártha*, *cogtha*, *toirthe*, *teangtha*, the genitives *daórtha*, *adhartha*, *cunnartha* from *mír* (a wall), *cogadh* (war), *toradh* (fruit), *teanga* (a tongue), *daóradh* (condemning), *adhradh* (adoration), *cunnradh* (a covenant), in which it makes no difference whether the suffix *-at* is originally word-forming as in *teinne*, or determinative as in *cú*.

Derivatives in *-te* (i. e. *-tia* or *-tāja*) after *s*, *l*, *n*, in which, however, *d* appears generally after *l* and always after *n* (evidently pure *d* and not *dh*), see in Zeuss 763 *seq.*; whether, however, *místae* (menstruus), *conde* (caninus), *anmande* (animalis), *talmande* (terrestris), *eiscsende* („intensivus”), *cenalpande*, *aniendae*, which are evidently derived from consonantal stems, have actually lost a vowel before the suffix, remains doubtful; the *d* is to be read aspirated after *r* and other consonants as after vowels, *bithgairddi* (perpetuo breves), has been wrongly explained, like *cethargarait*, it belongs to an *i*-stem, and is to be further carried back to an *nt*-stem. To the examples for *tt*, *t* from *t̃t*, *d̃t*, *th̃t*, *am-brotte* (momentaneum), *gutte gutae* (vocalis) — from which *angutas* 750 (vocalitatem suam) —, *aicnete* (naturalis), *scote scotae* („violarium”) from *seoth* (a flower), are evidently to be added *uàthate* (singularis) from *uàthath*, from which acc. pl. fem. *huàthati*, dat. pl. *uàthataib*, and *slabratae* (the gloss *catinensis* being erroneous) from *slabrad* (catena), which Zeuss, 769, erroneously places under *-ant*, so also, most probably, *dúnatae* (castrensis) from **dúnad*, cf. *a ríghdúinte* (their royal forts), Cormac's Glossary in O'Don. 233, *arsate* (antiquarius), cf. *arsid* (a genitive as it appears) Zeuss, 581, plur. *túati* (gentiles) 1043, from *tuàth* (populus), perhaps also *tecnate* (domesticus); in the consonantal stems with the nom. *-atu*, *-etu* we may assume **ntat*, but they could also have arisen from **trat* (cf. Skr. *-tva* n., Lith. *-tuca* m., Slav. *-stvo* n., but especially Lat. *-tūt* f. in *juventus*, *virtus*, *servitus*, *senectus*), which is sufficient reason for their retaining the tenuis *-t*¹¹⁷ as in the pronouns of the second person. Mod. Irish examples: *saoghalta* (worldly), *gallda* (exotic), *fíréanta* (righteous), *grianda* (sunny), *banda* (feminine), also with assimilation *daonna* (human) = *dóinde*; on the other hand, *mórdha* (majestic), *feardha* (masculine), *órdha* (golden).

Derivation with various suffixes: *éintíoch* (infinitus), from *cinníūd* (definitio) *luàtigítir* (rarescent), from *uàthad*, *boltigetar* (olent), from *bolad*, *múntíth* (institutor), from *múnnūd*; *ingrentíd* (persecutor), *líntídi* (fartores), *írchóiltíth* (maledicus), from *írchóiltíd* — *esartaíd* (caesor) is remarkable, exactly like *timmorté*! —

¹¹⁷ *Nelmarbtu*, *-tath* are at all events correct forms, and unjustly doubted by Zeuss, 763.

muntar (familia) is also, no doubt, to be placed under this category, and not to be compared with Gaulish *κομυντόριος*; *centat* (capitulum), from *cenn*, *sráthatah*, read *-tat* (aculeus), from *sráthath*; on the other hand, *epertith*, *berrthaid*, *doilbthūd*, *debthach*, and *dephthigim*, *tirthat*, from *tir*, etc.—Compare the Modern Irish infinitive, *do chantain*, but *d'fearthain*.—In *diltūth*, for example, the stem-vowel has been ejected, and because *l* precedes, we do not on this account know whether a mere vowel, or *n*, or a dental mute dropped with it.

(II.) *In Anlaut*. In the anlaut of the second member of a compound, whether the first member be a noun, a numeral, or a particle, the second a noun or a verb. Neither here nor in the syntax has Zeuss brought together the exceptions to the aspiration rule; but we may assume *a priori*, that the well ascertained law, according to which the dentals are not aspirated after *l*, *n*, *s*, *t*, *d*, *th*, *dh*, has in the main come into play also in composition and syntax, because it has a pure phonetic reason in the homogeneity of these consonants. Grimm (*Geschichte der deutschen Sprache*, 375) observes about Modern Irish “the linguals *t* and *d* suffer, however, no aspiration after liquids, but remain unchanged”; but this is taken at once in too wide and too narrow a sense, for *m* and *r* do not hinder the aspiration,¹¹⁸ and the mutes hinder it as well as *n*; what he further says, “I find also *maetire*, son of the land, as the poets call the wolf, not *machire*”, may be very simply explained in this way, that this is not true composition, but merely juxtaposition of the substantive with the governed genitive (= *maqras tírais*), where there exists no reason for aspiration. According to O'Donovan, 336 *seq.*, aspiration does not occur (except in the case of *s* with a mute following, to which, according to p. 54, we must also add *m*) with *d*, *t* after *n*, *d*, *t*; finally, in some cases not specially stated; *l*, *s* and the aspirated *th*, *dh* are not there mentioned, but it is scarcely to be doubted that they exert the same influence on *d*, *t* following, as we even find *dall-ciach* (a blinding fog) given without aspiration, so likewise *aththaoiseach* (a deposed chieftain), and *aithdheanain* (remaking); but, however, *aithléidhte* (re-heated), *athdóidhte* (reburnt). Now, if even the Mod. Irish, in which aspiration is so widely spread, that it has come in after every particle in composition, with few exceptions¹¹⁹ (*éa-* or *éi-*, *eas-*, *con-*, or *coin-*) has, nevertheless,

¹¹⁸ Compare *indhiden* (shelter, defence), *urdhairc eardhairc* (illustrious, renowned).

¹¹⁹ The eclipse after *di* is perfectly enigmatical in *diombuidheach* (unthankful), *diombuan* (perishable), analogous to *diomolaim* (I dispraise) on the other hand, with aspiration, *diomór* (very great), *dicheannaim* (I behead), *díothoghluidhe* (impregnable).

preserved in the above position the *d* and *l* pure; with much greater certainty may we look for the same thing in Old Irish, where the original limits of aspiration are exceeded only in very few instances (in *du-* and *mí-* for **dus-* and **mis-*). Accordingly, we find *s* preserved before mutes in *banscala* (servae), *cáin-scél* (bonus nuntius), *droíscéla* (malos nuntios), *soscéle* (evangelium), *athscribend* (rescriptum), *incomscribúdaíth* (syngraphum), *doscéulain* (experior), *doinseannsom* (incipit), after the verbal participle in *roscarsam* (recessimus); *t* after *n* in—*bantérisimí* (obstetrix), *gríontaírisim* (solstitium), *medóntaírisimí* (mediastinus)—compare Mid. Ir. *baintigerna* (domina), in Stokes' Irish Glosses,—*fíntan* (vinetum), *cáinteist* (bonum testimonium), *cáintoirtiu* (bona cogitatio), *cáintöl* (bona voluntas), *caintaídlé* (satisfactio), *sentinni* pl. (anus), *intonnaigim* (inundo), *intursitib* (irriguis), *tintúth* (interpretatio), *fointreb* (supellex);¹²⁰ after *l* in *ind-idultaigae* (fani), *iltoimddén* (*dd=t*, multarum opinionum), after *s* in *rostán* (rosarium), after *t* in *rechttáireid* (legislator), after *th* in *frithtasgat* (adversantur), *frithaídechtae* (contradictionis), for which *fritt-*, *frit-* is also written; we have, consequently, to consider *d* after *n* in *bandúlem* (hospita), *bandea* (dea), *bandechuin* (diaconissae), *bandachlach* (leno)—cf. Mid. Ir. *baindea* in Stokes' *Op. cit.*—*cáinduthracht* (bona voluntas), *senduine* (vetus homo), and after *l* in *ildáni* (multae artes), as *dura*, a hardening to *t* occurs after *t*, *th*, *d* (see *supra*), *biddianugud*, i.e., *bithd.*, however occurs, Zeuss, 781. For some other exceptions, such as the above mentioned *atbail* for *athbail*, *idpart* for *idhbhart*, where the hardening comes into play, at the same time (leaving out of consideration faulty spelling), I have not been able as yet to find any fixed rule; only we must not take for an exception what is not one, as for instance the name *Dúnpeleder*, Zeuss, 821, in which the *p* has remained pure, because this is no more a case of true composition than the above *mactire*, or the family names with *O* and *Mac*, which for the same reason are not aspirated, e.g., *O'Briain* (gen. *I Bhriain*, dat. *d'Ua Bhriain*, acc. *ar O'Mbriain*, according to O'Molloy, in O'Donovan, 369).

(III.) *In Syntax.* In Syntax, the Modern Irish should be used only with the greatest caution for determining the laws of anlaut (which were not very clearly or completely developed by Zeuss), because it has here given way still more to the tendency to use this, originally a purely mechanical phonetic change, as a dyna-

¹²⁰ Zeuss indeed assumes (195,848), after *in-* also in composition unchanged anlaut, as, however, the *n* does not drop out anywhere, we must presuppose a fundamental form, like Greek *évi*, consequently aspiration which is supported by *inchosc* (significatio), etc.

mic agent, a tendency that was already visible in the particle composition, and arbitrary rules of scribes and grammarians, who, as a rule, had no idea of the nature of aspiration and eclipse, have had their share in still further disturbing and confusing the original rule; nevertheless it may be here also of real service to us, if we consider perfectly unbiassed each grammatical form as that which it is, and not what it pretends to be, and bestow the necessary attention on the actual or apparent exceptions.

The phonetic changes are dependent in Syntax on two conditions: not merely on the nature of the sounds which come together, but also on the greater or lesser logical correlation of the words, a condition which did not at all come into consideration as an independent one in inlaut and composition; as in French, the pronunciation of the final consonant of the first word, even if it be capable of becoming sonant, does not take place between every two words, so in Irish, also, the auslaut does not exert in every position its influence upon the following anlaut. The closest combination is formed by the substantive with the preceding article and pronominal genitive, the preposition with its case, the verb with particles and pronouns, which, in writing, are either enclitic or proclitic; the substantive is less closely connected with a succeeding adjective (as a rule, a preceding one enters into composition) still less with a dependent genitive, the connection of the verb with a substantive, as subject or object, is the loosest. Next to this, the very unequal action of the auslaut is of importance: original *s*-auslaut does not apparently lose its protecting action in any position in Old Irish, upon succeeding initial consonants; final *n* also occurs often, where the combination is by no means so particularly close, as in *guĩdĩmse diũ nĩrutsu*; there are even phenomena which appear to point to an *ν* *ἑφελευστικόν* (cf. p. 90); on the other hand, the aspiration required by vocalic auslaut often does not occur even in the anlaut of the adjective, still more frequently in that of a dependent genitive. Many instances of omission are, of course, only a consequence of careless and imperfect writing, as, for instance, *s* and *f* often appear without a dot; but others are due to perfectly determinate phonetic laws, especially to the two frequently mentioned above; this is especially seen after the article, by comparing the older and newer form.

(1.) The article originally ended in *s* in the nom. sing. masc., gen. sing., and nom. plur. fem., dat. and acc. plur. of all genders (the neuter appears to have early passed over into feminine in the plural); in *n* in the nom. sing. neut., the acc. sing. and gen. plur. of all genders; in vowels in the gen. sing. masc. and neut., nom. plur. masc., dat. sing. and nom., and acc. dual of all

genders; according to this we have to expect in the acc. sing. (and nom. plur. neut.) and gen. plur. *n* (*m*) before vowels and mediæ, assimilation before liquids, and pure anlaut in the case of tenuis, *s* and *f*; in the gen. sing. masc., neut., nom. plur. masc. and dat. sing. aspiration, which is not written for mediæ, and in other instances pure anlaut of the following substantive or adjective. Most examples, also, agree with these observations, leaving out of consideration neglected aspiration, especially of *s* and *f*, which, however, in the case of *s* is generally made observable by a preceding *t* for *d*; gen. *inspirtó*, *intesa*, etc., should not, however, be reckoned among negligences of writing, they are to be looked upon rather as actual exceptions, according to determinate laws. The *s*, in *inspirtó*, cannot be aspirated on account of the following mute, hence the article is not written here either *int-* or *ind-*, because the *t* is hardened out of *d* or intercalated only before *s* (for which of the two explanations is the correct one, remains for the present still doubtful, as even in Modern Irish, *roimpe*, from *roim' sí* also appears along with *uimpe*, from *uimb' sí*); on this account *insenduine* does not get a *t* in the nom., but it does in the gen. *intsenduini*, inaccurately written *indsenduini*, and the pronouns *sa* (*so*, *se*) and *sin*, which are not aspirated, no doubt, because a double consonant originally existed in anlaut, form everywhere with the article *inso* *insin* (Zeuss, 275, 353, seq.). That the dental has also been preserved pure in *intesa* by the preceding sound (*n* or *d*), consequently that an aspirate is not to be pronounced here any more than in *induini*, and that Zeuss, 231, 232, 236, with all the observations appertaining thereto, is decidedly in error, is shown, besides, by the constancy in the examples (nom. fem. *indtogas*, gen. masc. neut. *intaírmehrutto*, *intesa*, *intaírdlich*, dat. *ontechtáriu*, *dontorúd*, *isintuísilsin*, *óntrédiu*, *dindtrediu*, *iarsintaírgiriu*, *hisintórunn*, *hontecnatatu*, *dintecnatatu*, *issintodochidiu*, *isintuaíchli*, nom. masc. pl. *intuísil*), also by the Modern Irish, which has maintained the same rule.

The laws of anlaut after the article look, to be sure, on first sight, and as represented by the grammarians, wonderful enough; that the nom. fem. and gen. masc. cause aspiration, and the gen. pl. eclipse agrees with the old rule; but that eclipse should occur in the dat. sing. after all prepositions, except *do* in West Munster, as O'Donovan gives at p. 63,—and except *do* and *de*, as is stated at p. 393,—that *s* suffers the so-called eclipse only after *do*, *de*, *is* with the article, consequently aspiration with an intercalated *t* before it, p. 70,—that *t* and *d*, as a rule, suffer in the singular as little eclipse as aspiration, while in the genitive plural, on the other hand, they are regularly eclipsed,—appears enigma-

tical, and the contradictory rules of the grammarians respecting the anlaut of adjectives (p. 110–117), appear to make the matter completely inexplicable. But if we examine this phenomenon closer, and compare the use of the prepositions and the examples from Keating (p. 394, *seq.*), light will be thrown upon this peculiarity, in which the confusion of speech among the people, and the foolish caprice of grammarians, have gone hand in hand, and immediately the exceptions become satisfactorily explicable. At p. 78 *seq. (ante)* attention has been before directed to the confusion in the case-endings, which had partially begun already in Old Irish, and which has been carried to an extreme in the Middle and Modern Irish; we can now complete and correct what has been there said. In the first place, almost every distinction between nom. and acc. has disappeared, in the singular, the nominative form, in the plural at one time the latter, at another time the former, has alone been preserved, and even where in an isolated instance both forms occur, they appear to be promiscuously used; the accusative form has very early replaced the nominative in the plural of the article; in the singular, on the other hand, the nominative has replaced the accusative, of which the Middle Irish already affords examples (cf. *der* in the Allemannian dialect of German). The syntactical peculiarity of the Old Irish of putting the accusative in many instances in place of the nominative, especially in the passive, and the complete similarity of both cases in the plural, which often originally existed or arose at an early period, as well as the slight difference in the singular masculine, which completely disappeared before *tenuis*, and *s*, *f*, facilitated this intermixture; in addition to this, in the article, both were from the beginning alike in the feminine plural; and in the noun, the accusative and vocative plural were the same, the latter being the only true accusative form, which is still preserved, and which may also be recognized as such by the unaltered anlaut of a following adjective. The confusion has gone so far in the spoken language, that this form occurs for the dative in the plural even after prepositions, one says, indeed, *do na fearaibh* (to the men), but also *do na capuill* (to the horses), O'Donovan, 83 *seq.* = $\pi\rho\delta\varsigma\ \tau\omicron\upsilon\varsigma\ (\tau\omicron\iota\varsigma)\ \iota\pi\pi\omicron\iota$; O'Donovan directs the supposed accusative to be put after *gan* (without), and *idir* (between), in the singular, in reality, therefore, the nominative. The true accusative form is to be found, on the other hand, in the so-called dative singular, for *o'nm-bárd* is as little a true dative as the French *au poète* (= ad illum poetam). Even in Old Irish the dative distinguished itself from the accusative in the vowel only in the *a-* (*ia-*) and *u-*stems, which were capable of an *u* umlaut, and this distinction must have ceased in Modern

Irish with the loss of this unlaut; all feminine and consonantal stems formed both cases alike, from the beginning with *i*-umlaut; there only remained, consequently, the difference of the auslaut towards the anlauts following. But we have already seen in the case of the pronominal suffixes, that the dative has only maintained itself after *de* and *do* in *díobh* and *dóibh*; on the other hand, the accusative has come in after all other prepositions, as the peculiar phonetic phenomena in *aca*, etc., show; consequently in that which the grammarians call the dative singular, a true dative is only to be recognized after *de* and *do*; after other prepositions, on the other hand, the accusative; and we should not wonder that in Keating, and in the North Munster dialect, the article gives rise to aspiration only in these cases (both prepositions, except in the County of Kilkenny, sound alike *do*), while everywhere else it produces eclipse. Here, also, then, similarity of form has gone hand in hand with syntactical corruption; the Modern Irish is surpassed in the latter respect by the Modern Greek, which has wholly lost the dative, and even combines *ἀπὸ* and *μέ* (*μετά*) with the accusative. The occurrence of the dative after all prepositions (even *gan* and *idir*) in the plural of substantives, is, no doubt, due to an effort to gain a prominent distinction, which was not given here by the form of the article (*na* without change of sound). Hence there have been preserved pure in the written language, the dative plural, only that already in the earliest times the article had begun to become truncated to *na*, the genitive singular and plural, and the nominative singular, in all instances; the dative singular, on the other hand, only after *de*, *do*, the accusative singular after the other prepositions (*gan* and *idir* excepted), never as objective case, the nominative and accusative plural only where they have sounded alike as in the vocalic feminine stems, otherwise they are always confounded. If we now study the treatment of the anlaut after the article, everything may be satisfactorily explained conformably to the old rule, *e. g.* :—

m. n.	<i>an t éan</i>	<i>an fear</i>	<i>an sruth</i>	from <i>int-</i>
g.	<i>an éin</i>	<i>an fír</i>	<i>an t-srotha</i>	„ <i>ind-</i>
d.	<i>do'n éin</i>	<i>do'n fear</i>	<i>do'n t-sruth</i>	„ <i>dond-</i>
(a)	<i>ó'n éin</i>	<i>ó'n bh-fear</i>	<i>ó'n sruth</i>	„ <i>inn-</i>
f. sg n.	<i>an uair</i>	<i>an chlann</i>	<i>an t-súil</i>	„ <i>ind-</i>
g.	<i>na h-uaire</i>	<i>na chloinne</i>	<i>na síla</i>	„ <i>na-</i>
d.	<i>do'n uair</i>	<i>do'n chloinn</i>	<i>do'n t-súil</i>	„ <i>dond-</i>
(a)	<i>ó'n uair</i>	<i>ó'n g-cloinn</i>	<i>ó'n súl</i>	„ <i>inn-</i>
pl. n.	<i>na h-uaire</i>	<i>na clanna</i>	<i>na síle</i>	„ <i>na-</i>
d.	<i>na n-uair</i>	<i>na g-clann</i>	<i>na súl</i>	„ <i>nan-</i>
g.	<i>do-na-h-uairibh</i>	<i>na clannuibh</i>	<i>do na síilibh</i>	„ <i>nab-</i>

When, therefore, *s* suffers the so-called eclipse after *is* (*in*) as in Keating—*is in t-saoghal* (in the world), the dative form is there exceptionally preserved, while *'san seanchus* (in the history) contains the usual accusative form; it is perfectly according to rule that *t* and *d* should remain pure after *do'n* (*de'n*, *isin*) for they are withdrawn by the *n* from the aspiration which should occur here; after other prepositions the strict rule requires, however, eclipse as well as in the genitive plural. But even the most abnormal modes of treatment of anlauts (as in Kilkenny and Tipperary, where *b*, *f*, *g*, suffer eclipse, *c* and *p* aspiration after all prepositions, and *s* is eclipsed, that is, aspirated by *t*; a real dative is preserved here, as the aspiration of the *c*, *p*, *s* shows, but *b* and *g* are assimilated with the nasal to *m* and *ng*, the softening of the *f* to *bh* is curious) agree, however, in this, that *t* and *d*, after the article, are nowhere aspirated; proof enough that in the Old Irish, also, we have to deal with a distinct law, and not with a negligence of writing. If individual writers have also changed the anlaut of substantives without the article, *e. g.*, have eclipsed in the genitive plural, it is because they have totally misapprehended the cause of the phenomena, it is, therefore, wholly unjustifiable.

That the adjective after the article is subject to the same laws of anlaut as the noun substantive, may be concluded *a priori*; but in general the case occurs very seldom, as the adjective comes mostly after the substantive, in the opposite case composition takes place, although they are sometimes separately written, as in *arnóib briàthraib*, Zeuss, 926 (read *arnóibbriàthraib*, as the absence of the ending requires). In Modern Irish such combinations are, to be sure, mostly written separate, but the adjective remains unchanged, and the anlaut of the substantive is aspirated (except in instances like *seanduine*) so that the composition is readily recognizable (O'Donovan, 347, 349).—Besides the pronouns *cach*, *cech*, *nach*, *alaile*, and the cardinal numerals which regularly precede (*indala* appears to be compound, the ordinary numerals besides *cétne* and *tánaise* always precede the substantive) *sain* occurs now and again inflected before the substantive (*saini persin* in the nom. fem. plur., but *hipersonaib sainib*), mostly, however, compounded; *uile* fluctuates, *cétne*, also, mostly precedes, but sometimes comes after the substantive; *aile* and *tánaise* are, on the other hand, always placed after it.

(2.) The same influence of the auslaut on the following anlaut occurs, of course, between adjective (adjectival numeral and pronoun) and substantive, whenever the adjective has attributive value, whether it goes before or after; the examples in Zeuss are, however, few, as the aspiration is never noticed in the case of *b*, *d*,

g, *m*, and very irregularly in the case of *s* and *f*, and for the reasons above given must often be suppressed in the case of *t* (*d*). Examples for the aspiration of the adjective: in the nom. fem., *mo thol cholnide, cach thúare*; in the gen. neut., *indfolaíd chétnai*; in the dat. neut. *isindanmaim chétnáidiu, hi togarmim fíreindaíre*; ¹²¹ in the dat. fem., *díngutai thóisig, iar riágoil chenélaig, for láim chli*; in dual fem., *díguttai fódlaídi*. The aspiration is suppressed according to determinate rules in: gen. masc., *inchruinn toírtich, toírtig*; in the dat. neut., *fardiúll tan. (tín-aisiu)*; in the dat. fem., *do persín tanaísi, hi persín tánaísi, isindepistil tóisich*; from negligence in the dat., *huándlúithi seim*, etc. Examples of the transvected nasal are given at p. 90. That the principle has not lost its force, we see in the Modern Irish, where we again find in the adjective placed after the substantive aspiration and eclipse, under the same conditions (and also the same confusion in the dat. sing.) as in the case of the substantives; aspiration occurs in the voc. sing., only after consonants in the nom. plur., not after vowels, *na fir thréana*, but *treasa móra*, because in the former *-i* was the original auslaut, and in the latter *s*; in like manner, the voc. plur. preserves the original anlaut—*á féara tréana*.

Examples for the aspiration of the substantive: in the gen. masc., *alaili thríuin* (I have not as yet found nom. fem. sing.); in the dat. masc., *re cach thuisiul, ónach fochun ailíu, isinóinchorp, in óen sosáth sill-*, 1017, neut., *icachthir*, fem., *ón chetní phersín*; in the nom. plur., (*inchamthuisil* appears to be a compound), *itchethir chét*; the aspiration is prevented in the dative (f.) *ondó-entóisrinn*; left out from negligence in *con alailiu fogoir, ó óin sil-, don chétni persín, hi cétni persín, in óen sill-*, 1017, and remarkably enough in almost all cases which I have yet found, after *cach*—gen., *caích cenéuíl*, dat., *do cech cenélu, do cach ceneoll, do cach cenéolu, ocech cenélu, hi cach ceniul, do cach ceniul, do cach cathrur, do cach corp, hi cech caingnín, icach sens* (does a similar euphonic law rule here, except in the last instance, as in the case of *t* after dentals? *Nephplandatu* may be regular). The curious *cachnóen chrann*, 999 (the subject in the acc. like *cech consaín*, 1017), may be explained as composition, as in the nom., *óenchoímdiu, oinchorp*, 587, acc. *in óenchorp*, 580, *trí óen pheccad* (on the other hand *cach óen creitfess*, gen. fem., *inna oena méite*), and is therefore to be read, *cach-n óenchrann*; *aon* is always to be looked upon as in composition with its substantive in Modern Irish, for it

¹²¹ These two formulæ show that of the two attempted explanations given in *Beiträge*, I., 451 (Stokes' "Observations on the Irish Declension") only the second is possible: *anmāmbi, anmāmbi, anmāmmi, anmāim*.

aspirates the anlaut of the substantive, e.g., *aon chluas* (one ear), f., *aon chraun* masc. If the masc. follows *dá* (which in Mod. Irish has also replaced the fem. *dí*), in the same form as in the nom. sing., the fem. in the same form as in the dative singular, but both being aspirated, *dá chrann*, *da chluais*, and that the adjective in the plural occurs with aspiration, we have an exact correspondence with the little we know of the dual in Old Irish (see p. 86 seq.), and even the *n* of the old neutral form *dan*, is still to be recognized in the eclipse in *dá d-trian* (two thirds); O'Molloy had also suspected relics of the dual in it, and O'Donovan's argument against this view, as well as in respect of the form after *céad*, *míle* and the decades, is only in part true; that is, the apparent similarity of form which as a rule occurs between the nom. sing. and plur. of both genders, and between the nom. sing. and dual masc., has gradually led to the use of the nom. sing. after these numerals even where the gen. pl. (or nom. dual masc.) had preserved the original difference. The occurrence of eclipse after *seacht*, *ocht*, *noí*, *deich*, is easily explained, and was already founded in the Old Irish by the *n* after these words. The explanation is more difficult of the pure anlaut after *cuig* and *míle*, where we should, certainly, have expected primitive vocalic auslaut; in the former, according to the analogy of *πέμπε*, *quinque*, in the latter, in consequence of the Old Irish *dí míli*, which points to a feminine; the consonantal auslaut which we must assume in *céad* (perhaps already O. Ir. masc., compare the above *cethirchét*) and *sé* (for *ses*=*sex*), as in the plural forms, *trí* and *ceithre*, is easily understood; we have *nt*-stems in *fiche*, and the remaining names of the decades, whose nom. sing. are pronounced *fichē*, *tricha tríocha*, gen., *fichēt fichēad*, **trichat tríochad*, and nom. plur. (like the dat. and acc. sing.) **fichit fichid*, *trichit tríochaid*, etc.¹²²

(3.) The combination between the substantive and a succeeding genitive is much weaker. Examples of the nasal preserved in the accusative, (*frislon d nílfolad*, 1029), nominative neuter (*torbe ním dibi*), and the genitive plural, are numerous enough (compare On the so-called prosthetic *n*, p. 90); but, as has been already above remarked, no very particularly close combination is necessary for this; on the other hand, aspiration occurs rather seldom. The nom. fem., *trebair chollno*, *toll chollno*, *ciáll chésto*, *ciáll chésta* (the neut., *aínm thriúin* is singular, beside the *aínm-n* of the examples in p. 91), dat., *hítošūg šuín*, 1011, *do immfólung fúil*, 1016, in *óen šosuth šill.*, 1017, *do thaídbse šuperlaít*, *ó thoil*

¹²² The doubt expressed at p. 433, vol. I., of the Beiträge is removed by this; *fichē*, *tricha*, for primitive *vicint*, **tricant*, now approach much closer to the Sanskrit *trīṇṣat*, and are a mean between the latter and the Latin *viginti*, *triginta*; in meaning they express the Greek *εκάς*, *τριακάς*.

cholno, *do líní chéibhtho*, are opposed, for example, in great number, besides the regular *ond áes tuàithe*, *dothabáirt toirse*, by the nom. fem., *bandea cruithnechta*, *bandea tenéd*, *hirés creíme*, *ciáll eech muíd* (*tír taírngíri* may, like *tír-n-erend*, depend upon a change of gender); by the gen., *eísséirgi er.*, the dat., *do híce cáich*, *illestur ferce*, *fomám pectho*, *a raínn pectha*, *dí rect pectho*, *do dechrugud persíne*, *isóiri ceneóil*, *hi claar crídi*, *dí muntir cessaír*, *do cach ceneólu serbe*, *oc asnam tíre taírngíri*, *hi foísíte césto*, so that it would appear the fluctuation could scarcely have been here confined merely to writing. According to O'Donovan, 368, *seq.*, aspiration in Modern Irish, also, is generally only usual in proper names, although Keating used it also in other cases; but it has here inorganically extended itself to cases like *Airdeasbog Chaisil* (the Archbishop of Cashel), and consequently is used as a purely dynamic agent; on the other hand, the above mentioned exception, which the family names with *O* and *Mac* make, rests fully upon the Old Irish anlaut laws.

(4.) The pronouns stand in such intimate combination, as well with the substantive as with the verb, that many depend upon both parts of speech, not merely as enclitic or proclitic, but even penetrate between the preposition (verbal particle) and the verb. Thus the anlaut of the noun is under the influence of the so-called possessive pronouns, *i.e.*, the genitive of the personal pronouns, whether the latter appear in their complete form (absoluta of Zeuss), or in a shortened form (infixa of Zeuss); *mo*, *do*, 3. masc. *á* end in vowels, 3. fem. *á*., originally in *s*, the plurals, *arñ*, *farñ* or *barñ*, *i.e.*, *bharñ* and *añ*, in nasals, hence:—*mothol*, *mochland*, *imchumriag*, *domthoschul*; *thúal*=*dofual*, *itchóimthecht* (inaccurately, *dosenmáthar*, *itsenmáthir*, *cutseitchi*); *achésta* (inaccurately *apectha*); *aggním*; *arnét*, *arndiis*, *armbrethre*, *arloure-ni*, *arsóire-ni*; *farnintliucht*, *farclúu*, *forserce*; *ananman*, *ambés*, *accursagad*. This influence is even now still felt in:—*mo súil*, *m'fuil*, *do chos*; *a cheann*; *a ceann*, *a h-inghean*; *ár g-cinn*; *bhar g-cosa*; *a g-cinn*. The anlaut of the verb is dependent upon the preceding personal pronoun (infixa of Zeuss), but the decision as to their original auslaut is rendered more difficult by the contradictory ways in which they are written, and also by the circumstance that Modern Irish has not this kind of combination. Vocalic auslaut appears to be certain in 1. and 2. sing.—*ní m charatsa*, *nomthachtar*, *nimtha*, *nímptha*, *fomchridichjider-sa*, *nudamchrocha*, *cofordunthésid-se*, *fritumthiagar*, *fordomchomaithe*, *rotchechladar*; we find, however, *condumfel*, *aromfoimfea*, *imnumforling*, *fomfírfidersa*, *romsóirsa*, *coatomsnassar*; *rodchúrsach*, to be sure, is found in 3. sing.; but, on the other hand, we have *immidforling*, *cenodfil*, *rondpromsom* (with rel. n.), *n-* and

s-, appear never to aspirate—*ronsóir, nistabur*, there is, however, *nonchretid-si* (ut in eum credatis); we read in 1. plur., *fonsegar, nunsluñfem-ni, nonsóirfēa, ronsóirni cininfēl, ronfitid-ni, ninfortēt-ni* (*conintorgáitar, honuntogaitarni, nintá* are indifferent in consequence of the *n-t*), in 2. plur. *atobel, nobcarad, fordubcechna, forndobcanar, rondobcarsam-ni, robcar-si, nondubcairim-se, robclandad, nibtá, dobtromma, atobsegatsi, cotobsechfēder, nondob-sommúgētar, nobsóirfa-si, nachibfēl, condibfēl, manudubfēl, robfothgēd*, and yet *nidan chumachtig* and *atdubelliub* (*i. e., atdulfelliub*) appear to point to aspiration; in 3. plur. *da-*, as well as *sn-*, seem to be without aspirating power—*nodascara, rondasaibset, nondasoirfēa, nosinguid-som, dosinbera, nísfitir, nosmoidet, nisjitemmar, rospredach, roscomal*. The combination between the verb and relative pronoun is equally close—*an* (*anasbiursa, ar-rocar, acarthar, apredchimne*) and *no* (*nocretim, nopredchim-se*, correctly or negligently written?); it is curious that in Modern Irish the nom. *a* aspirates and eclipses only after prepositions, or as absolute neuter (what, all that).

Enclitic pronouns and pronominal adverbs are, for their part, in respect to the anlaut, under the influence of the preceding word, the suffixed pronoun *sa* (*se, so, su*), even in respect to the vowel. We must, consequently, conclude from the circumstances that the *s* remains uninfected, that an original double consonant existed in anlaut, not only for *som* (*sem*) as Stokes has correctly remarked (*Beiträge*, I. 469), but also for *su, sa, so* (*se, siu, sin*), especially as *intíthall*, with aspiration, stands opposed to *intísíu*, and *messe, tussu* are found, whilst with the article we have, as was mentioned above, not *intso* or *indso*, but *inse, insin*; only it remains doubtful whether all these pronouns belong to the same stem (say *svu-n*), or whether the *-sa* after pronouns is to be separated from the (as it appears) adverbial *-sa, -sin*, after substantives. Simple anlaut, on the other hand, is betrayed by the dative *siu*, and the compound pronouns *side* (*saíde*, nom. plur. *saídai*, Z., 9), *sodañ* by the aspiration in *dešiu*, Z., 595, and *ósuidi*, dat. fem., *olšuide, am. šodañ, aršodañ, olšodañ, olšodñ, fošodñ*.

(5.) I have nothing to add to what Zeuss has said on the treatment of the anlaut after prepositions and other particles; that the *s* after *reñ, con, in, iarñ, for, tri* (and in part also after *la, a, fri*) belongs to the article, is now, I believe, generally admitted. I know no explanation for the hardening of mediæ in the verb substantive (also *ni tēnat*, Z., 585, for *ni dénat*) after *ro* and *ní*, which, nevertheless, otherwise produce aspiration; *trithemel, trichretim*, along with *tresinful*, among others, is equally striking. The *dús* (*dúus*) before *in-* in the indirect interrogative is, no doubt, contracted from *do-fius, du-fius* (ad sciendum). Compare English *to wit*.

(6.) The action of the verbs on the object as regards anlaut must have been already in Old Irish very weak. Zeuss gives only two examples, and O'Donovan has nothing about it in Modern Irish; on the other hand, the aspiration of the anlaut after *ba*, *budh* is given by him, also, as a rule, while in the documents in Zeuss, more examples without aspiration after the root *bû* may be found than with it.

§. 6. *Loss of P in Celtic.*

One of the most interesting phonetic peculiarities of Gaedhelic is a certain aversion to *p*, which is manifested in different ways.

Firstly, the Gaedhelic, as was long since remarked, has very frequently preserved the guttural where other languages, especially the Greek and the Kymric, have allowed the labial to replace it: thus, in accordance with the Latin, as opposed to the Greek and the Italic dialects, in the interrogative pronoun and all derivatives, Ir. *cách*=Kymr. *paup*, quivis, Gaedh. *nach nech*=Kymr. *nep* aliquis; in the numerals Gaedh. *cethir*=Kymr. *petguar* four, and Gaedh. *cóic*=Kymr. *pimp* five; further, for example, in Gaedh. *macc*=Kymr. *map* filius, Gaedh. *cland*=Kymr. *plant* proles, Gaedh. *crann*=Kymr. *pren* arbor, Gaedh. *cren*=Kymr. *prenu* emere, Gaedh. *ech*=Kymr. **ep* equus (Gaul. *epo*-, Welsh *ebawl* a foal), Gaedh. *sech* praeter=Kymr. *hep* sine, also, no doubt, Gaedh. *ceun*=Kymr. *penn* caput, although Pietet (Beiträge 86) considers *penn*=*pinda* older. Compare, also, Gaedh. *sechim* sequor, *sechitir* sequuntur, in opposition to which the defective Welsh *heb* inquit may be equated with the Greek ἔννεπε.

Secondly, even *c* or *ch* has sometimes replaced primitive *p*¹²³ even in loan-words, as *caise* (pascha), *coreur* (purpura);¹²⁴ the circumstance is somewhat different with *cuingeis*, which, like O.H.G. *fimfchusti* is only half borrowing, half imitation of pentecost; I cannot, however, look upon *fescor* or *fescar* vesper, as borrowed, for the Welsh *ucher*, as opposed to Corn. *gwesper*, Arm. *gousper*, likewise betrays a guttural (*ch*=*sc*) like Lith. *vakaras*, Slav. *večera*. *Ch*t is found for *pt* (as in Low German, *nichte* for *nifte*) in *secht* septem, *sechtmaine* septimana, *necht* neptis.

But in anlaut an aversion to *p* shows itself in an especial

¹²³ To this category I also reckon the first guttural in *cóic*, as in Lat. *quinque* and *coquo*, which I attribute to assimilation (as in part the second labial in *πέμπε* and *πέπων*).

¹²⁴ Pott, Hallesche Literarische Zeitung, 1844, S. 289, Anmerkung.

manner, not only in inconvenient combinations like *ps*, where, for instance, Gaedh. *salm* agrees with O.H.G. *salmo* for *psalmo*, but in the most convenient *pl* and *pr*, nay even before vowels, and not merely in Gaedhelic only, where perhaps the majority of cases of *p*-anlaut is due to borrowing (as in German, cf. *peccad* peccatum, *persan* persona, *precept* praeceptum, *amprom* improbus, *prim* primus, for the true Celtic *cétne*), but frequently also in Kymric, which is otherwise, however, as little averse to *p* as, perhaps, the Greek. It especially strikes one that, at first sight, we cannot discover, in both branches of the Celtic family, a single one of the many prepositions in Sanskrit and the other cognate languages with *p*-anlaut (*pará*, *pari*, *pra*, *prati*, and their relatives). Pictet and Bopp have assumed that the *p* in these words has passed either into *b* or *f*, and very little of importance can be objected against the examples of the *b* for *p* in Pictet (De l'affinité, etc., p. 49), isolated examples also occur in all languages of an irregular change between tenues and mediae, in Celtic, for example—Gaedh. *gabbar*, Kymr. *gafar* = Lat. *caper*, O. Norse *hafr*, A. Sax. *häfer*; Gaedh. *gabál* = Kymr. *kafael*, Lat. *capere*, Goth. *hafjan*, conversely, Gaedh. *tenge* = Goth. *tuggó*; Gaedh. *ithim* = Skr. *admi*, Lat. *edo*, Goth. *ita*; but the pretended change of *p* into *f* is therefore the more doubtful. Scarcely one of the examples quoted has direct evidence in its favour, but certainly the parallel Kymric, *gu*, *gw*, does not admit of the assumption of the direct passage of *p* into *f*, at most, of one through the mediation of *v*, from which the Gaedhelic *f*, and the Kymric *gu*, were then evolved according to their special phonetic laws. So, for example, Gaedh. *frith*, Kymr. *gurth*, certainly admit of being connected with the Sanskrit *prati* by a Celtic fundamental form **vrith*, **verth* (= **vrati*, **varti*), by which the aspirates would be developed in both languages perfectly according to rule, in the Gaedhelic between the vowels, in the Kymric in the position *rt*. The end vowel in isolated use must then, however, have dropped off very early, as the Gaedhelic has there only the form *frí*, which does not infect the following consonants; for the *o* before the article belongs as little to the preposition *an* in this case as in *ré*, *iar*, *in*, *tri*. But the transformation of the Sanskrit *pra* to Gaedh. *for*, Kymr. *guor*, appears altogether improbable to me; for the Celtic preposition (with which the intensive *guor*-, Gaul. *ver*- appears to be identical) is obviously related to Gaedh. *fo*, Kymr. *guo*, in form and meaning exactly like *super* to *sub*, *ὑπέρ* to *ὑπό*, Goth. *ufar* to *uf* (which also agree in the double construction), therefore, also, as Skr. *upari* to *upa*. Only a doubt can, therefore, exist as to whether the Celtic had perhaps (like the Slavonian in *na* = *avá* and *po* = *upa*) dropped the initial vowel, and then changed

p into *v*, or whether it had softened and suppressed the *p* after the *u*, so that the fundamental forms **va* and **vai* from *u(p)a* and *u(p)ari*, common to the Gaedhelic and Kymric, had developed themselves; the latter is my subjective conviction. If the *i*, dropped in *for*, *guor*, no longer exerts, almost anywhere,¹²⁵ an action upon the following consonant, it shows that the Celtic agrees with the Latin, Greek, and Gothic in the early rejection of that vowel; but perhaps a trace of the *i* may be recognized (as in O. Norse *yfir* in opposition to Gothic *ufar*) in the Gaulish intensive prefix *ver-*, the *e* of which may have arisen either directly, or through the intermediate stage of *i* from *a* by the influence of *i* in auslaut.

The Sanskrit *pra* and *pari* are rather to be found in a fourth class, among words which have wholly lost the *p* in anlaut, as in the Gaedhelic *iasg*=Kymr. *pisc*, *pysg* piscis, *athir* pater, which includes in both languages the root Skr. *par* (*pṛ*), which always appears here, as in German, Greek, and Latin, with *l* for *v*. To this category belong, with a preceding liquid, Gaedh. *lín*=Kymr. *lawn* (Welsh *llawn*, Corn. *len leun*, Arm. *leun*) plenus, *lín* plenitudo, *lanad* and *línad* implere, *rolín* implevit, Welsh *llewni* implere, *lloneit* plenitudo (quantum implet); with a preceding vowel, Gaedh. *comalnad* impletio, *comalnadur* implet, *comalnamar* implemus, *comallnithe* impletus. From the same root descends further **paru* much=Skr. *puru*, Gr. *πολύ*, Goth. *filu*, which the Gaedh. *il* (for *pil*) very accurately represents, whence *ilar* multitudo, *ilde*, pluralis; the Gaedh. comparative *lia* agrees with the Greek *πλείων*, Lat. *plus*; compare further Welsh *liaus*, *lliaws*, *laws*, multus, multitudo=Corn. *luas*, *leas*, W. *llawer*=Corn. *llewer* multus, Gaedh. *laur*, *lour*=Corn. *loar* sufficiens, satis and *loure* sufficientia, W. *lluossyl* multitudo.

Similarly Gaedh. *lethan*, Kymr. *litan*, *llydan* broad, Welsh *lledann* to spread out (*llet*) *lled* and *llyd* latitudo, connect themselves with Skr. *pr̥thu* for *prathu*, Gr. *πλατύς*; the Kymric adjectives in *-lit*, *-llyd*, fem. *-lled* with the meaning "full of something", if they are really compound, belong in their second part either to the root in question, or to the preceding one.

I now likewise recognize the Skr. *pra* in the prefix *ro*, which appears in inseparable combination as an intensive particle, and in separable combination, as nota praeteriti especially; to the

¹²⁵ We find, nevertheless, in O. Ir., the secondary forms *forchain* *forchun* *praeipio*, *forchain* *praeipit*, *forthéit* *adjuvat*, *forchongrim* *mando jubeo*, *forchongair* *mandat*, along with *forchain* (*forcetul doctrina*), *fortéit*, *forcongrim* *forcongru*, *forcongrair*, in Modern Irish, *foircheann* for the old *forceann finis*; the rarer form *foir-* owes its *i*, no doubt, to the influence of the vowel of the following syllable (as in *foirbthe* for *forbuide*). Zeuss, p. 212, also mentions eclipse in Kymric along with aspiration, which likewise proves vocalic genesis.

same stem belong Gaedh. *ré, rén, rémi* (superlative form as primum?) and Kymr. *rac* (=Skr. *prác*?) I suspect the Skr. *pari* [but compare the next section] in the Gaul. *are*, whose fundamental form appears to be **ari*; compare Gaedh. *ar, air, er, ir*, Kymr. *ar, er, yr*, which may be very well compared with the Gr. *περί*, in the meaning generally, and in the shades of meaning which it expresses; thus the intensive *er* agrees with the Gr. *περί, περ*, Lat. *per* in *permagnus*. If a separation could be carried out between *ar* and *air*, I would prefer comparing *ar* with the Gr. *παρά*; Caesar's *Armorica* might then be justified as *παραλιά*; *Aremorica* (*περιθαλάσσιος*) may, however, be also explained. The Corn. and Arm. *war* contains, perhaps, an indication of the lost labial; the form *am-* also, which the primitive *an* assumes in Gaedh. *amíres* (unbelief), *amíressach* (unbelieving), may owe its origin to the subsequently dropped *p* of *ir-es*.

Finally, the Gaedh. *ire* ulterior (erroneously described by Zeuss as a comparative, for *ireiu* is the comparative), may be referred to the stem Skr. *para*, and compared with its nearest akin the Greek *παραίος*.

§. 7. Loss of *P* in Celtic, continued.

Since the preceding was written, I have found an interesting example of the loss of *p* in anlaut in *én* (avis) = **ethn*, V. *hethen* (volatile), W. 1, *aetinet* plur., (volucres),—with the derivatives V. *idne* (auceps), *ydnie* (pullus), the compositum, W. 1, *etneoilhaam* (augoror),—and the related words, W. 3, *adaned*, plur., (pennae), W. 1, *atar*, 2, 3, *adar*, (coll. aves), sing. W. 1, *eterinn* masc., 2, 3, *ederyn* (avis, volucris), evidently from the root *pat* (*πέτομαι*),—compare Skr., *patatra, patra*, A. Sax. *fēðer*, O.H.G. *fēðara*, Gr. *πτερόν*, and Lat. *penna*, from **petna*. Pictet (Beiträge, II. 90), like Pott (Etymologische Forschungen, I. 2te Aufl., 699 seq.), equates Gaul. *are-*, with the Vedic *ára*; I cannot, however, convince myself that this, in descent as in meaning, still very ambiguous word has been preserved as a preposition in European languages,¹²⁶ and therefore, I still assume the loss of a *p* in this preposition; but I entirely give up the equation with *pari, περί*, to which I was even then persuaded with difficulty by the form *aír-*. Many prepositions appear in Old Irish just as in Lithuanian (Schleicher's Lit. Gram., p. 133), in a double, nay, even in a treble form, a circumstance which I did not formerly observe, the shortest mostly occurring in independent use, the stronger in com-

¹²⁶ Also I do not see why (notwithstanding Pott's energetic protest against it) Lat. *ad* and *ar*, which only appear before labials, could not have coëxisted during a long period as dialectically different forms, just as well as N.H.G. *sanft* and *sacht*, as the transition of *d* into *r* is proved by *meridies*.

position, and before pronominal suffixes, with which the peculiar intercalated syllables in Kymric may be compared. Examples: *in* (*ingün*, *itossüch*) *in'* (*inchosc*) *ind'* (*indiumm*), *coñ c. d.* (*condiuiti*, *coséitchi*) *com'* (*comchésad*) rarely *coñ* (*cosmil*), *còs* (?) *c. a.* (*có osnada*) *cuc'* (*cucci*), *ren* (*renairite*, *recach*) *rem'* (*remil*) *remi* (*remiepur*, *remthechtas*), *iarn* (*iarmbaithiäs*, *iartimnu*) *iarma* (*iarmafoich*, *iarm(s)uidigthe*) once *iarn* (*iarfaiäü*); *as* (*abäs*, *asind-*) *ass* (*äsib*) *as* (*asoire*), *tars* (*tar crích*, *tarsin-*, *3. taruäs*) *tarmi* (*tairmthecht*), *tris* (*trithemel?* *tresin-*, *3. triit*) *tremi* (*tremdirgedar*), *fris* (*fricach*, *frissin-*, *3. friss*) *frith'* (*frithcheist*) seldomer *fris* (*frisbiur*); *ó* (*hóthoíl*) *uad* (*uad-fialichthi*); even *forthéit* along with *fortéit* points to *for'*. Thus *ar'* (*archiünn*, *archënn*) also represents undoubtedly a fundamental **ara* (therefore, perhaps, **para*), *aír'* (*aírchinn*) and *aíri* (*aíriumm*) on the other hand, very probably a strengthened form **aré* from *(*p*)*arai*, and Ausonius measurement *Arémōricæ* need not be at all looked upon as forced by the hexameter; hence **ara*=*ar'* is to *παρά* as **aré*=*aír'* is to *παραί*=Lith. *prē* (*pry-*, *pri-*)=Slav. *pri*, and Gaul. *arémoricos* would be **παραιθαλάσσιος*, as the modern Breton *arvorek παραθαλάσσιος*. But the fundamental meaning of *ar-* appears to be N.H.G. *vor* [Engl. *fore*] (*pro* and *prae*) from which *für*, with all its shades of meaning, was developed, which the English *for* and French *pour* might denote: *archiünn* (*vor dem angesicht*, *before the face*), *archënn* (*vor das angesicht*), *arse* (*pour cela*, *for that*), *arnaib uilib eumactib* (*prae omnibus potestatibus*), *aíri* (*therefore*, *c'est pourquoi*), *doaírchannim* (*portendo*), *argur* (Goth. *faurbiuda*, N.H.G. *verbiete*), *arañ* (*pour que*); even the conjunction *ar* is to be found in the English *for*; again *anaír* is properly N.H.G. *von vorn* [Engl. *from before*], *aírhër*=*παροίτερος* (*πρότερος*), O.H.G. *fordoro*, *aíre* and *aírech* represent the Skr. *púrva* and the N.H.G. *vorig*. Now how does all this agree with *pará*, which the Gr. *παρά* is supposed to represent? At the risk of being considered a very great heretic in etymology, I answer, certainly not with Skr. *pará* to which Greek and Latin forms in *ε* and *e* correspond (*παρά* either not at all, or only in certain combinations), and which is itself only weakened from **apará*; but no doubt with the **pará* of the primitive Indo-European language, which appears again in Skr. *purá*, but is preserved in Gr. *παρά*, as is **paras*, Skr. *puras*, in the Gr. *πάρος*; for notwithstanding the Gothic *faura*, the Sanskrit *purá* has no more preserved the primitive vowel than *puras*, because Goth. *faur* may be equated with it, hence not only Zend *paoürva*, but also Old Persian *pa-ruva* represent Skr. *púrva*, and the Goth. *fairuja* (*fairneis*) with the more modern derivative, represents the Skr. *purána*,

all being relatives of the Lat. *prae*, *pro*, *por*., the Gr. *παρά*, *παρά*, *πρό*, the Lith. *pra*, *prė*, Slav. *pra*, *pro*, *pri*, as well as of the O. Ir. *ar* and *aīr*, and as *vor* ethically modifies its meaning to *für*, so it also weakens itself in meaning to *an* (compare *praebere* = *παροίχεν*). I have already spoken above of Modern Irish *ar*, to which the supposition of Pictet respecting Old Irish *for* applies.

APPENDIX.

APPENDIX.

I.—ZEUSS ON THE INFLEXIONS OF NOUNS IN IRISH.

[The following pages contain a translation of the part of the second chapter of the *Grammatica Celtica* of Zeuss, concerning the inflexions of the noun, to which reference is so frequently made in the Celtic studies of Dr. Ebel. One of the most remarkable features of Zeuss' work is the large number of examples taken from MSS. which he has brought forward as the basis upon which his grammatical canons are founded. Thus the examples given in the part of the chapter here translated fill considerably more than thirty pages. All these examples not being necessary for the purposes for which this translation was made, only a small selection of them has accordingly been given.]

(A) *Declension.*

In the Old Irish language, the nouns of which have preserved a great variety of forms—in this respect far surpassing the Welsh even of the same period—we find two orders of declension, of which the first, on account of the prevalence of vowels in the inflections, may be called the “vocalic”, and the second, for a similar reason, the “consonantal order”. To the former belong the adjectives, which do not, as in other languages such as the German and Slavonic, possess peculiar forms of their own; substantives alone are found in the latter, though in less number than in the first. In both orders the flexional vowels are either exterior, applied to the end of the word, or interior, placed immediately before the final consonant, whether it be a radical or derivative one. There are, moreover, some anomalous nouns differing from the usual forms of declension, and exhibiting others peculiar to themselves.

FIRST ORDER.

Substantives and adjectives of the masculine and neuter genders agree in their declensions. Those of the feminine gender have forms of their own. I shall give first a table of all the forms of declension, which I call series, with a paradigm of each; and then substantives and adjectives from the codices confirming the forms of all the series here exhibited, or even such as present any slight varieties.

DECLENSION OF NOUNS *Masculine and Neuter.*

Paradigms: I.—*Céle* (a companion). It has not appeared so neces-

sary to give an example of a derivative of this first series, such as *echire* (a horseman, a muleteer?), *tectire* (an envoy), as of the following, on account of the internal vowels inflected: II. *ball* (a member), primitive, *tuisel* (a case), derivative example. III. *bith* (the world), primitive, *dilgud* (forgiveness), derivative.

The neuter differs so far only from the masculine, that the accusative and vocative are formed like the nominative; and, in the plural number, the same three cases take peculiar inflexions, different from the masculine, as will be rendered evident by the examples which follow:—

I. Series.			II. Series.		III. Series.	
Sing.	Nom.	céle	ball	tuisel	bith	dílɡud
	Gen.	céli	baill	tuisil	betho	dílɡotho
	Dat.	céliu	baull	tuisiul	biuth	dílɡud
Sing.	Acc.	céle	ball	tuisel	bith	dílɡud
	Voc.	céli	baill	tuisil	bith	dílɡud
Plur.	Nom.	céli	baill	tuisil	betha	dílɡotha
	Gen.	céle	ball	tuisel	bithe	dílɡuthe
	Dat.	célib	ballib	tuislib	bithib	dílɡuthib
	Acc.	céliu	baullu	tuisliu	bithu	dílɡuthu
	Voc.	céliu	baullu	tuislin	bithu	dílɡuthu

DECLENSION OF NOUNS—*Feminine*.

Paradigms: IV.—*tuare* (food). V. *rann* (a part), primitive, *briathar* (a word), derivative.

		IV. Series.	V. Series.
Sing.	Nom.	tuare	rann
	Gen.	tuare	rainne
	Dat.	tuari	rainn
	Acc.	tuari	rainn
	Voc.	tuare	rann
Plur.	Nom.	tuari	ranna
	Gen.	tuare	rann
	Dat.	tuarib	rannib
	Acc.	tuari	ranna
	Voc.	tuari	ranna

I. SERIES.—Of nouns externally inflected, and ending in *-e*, which in the different cases becomes *-i*, *-iu*, *-ib*. Neuter nouns in the nom. acc. and voc. plural vary from *-e* to *-i*.

SINGULAR.

NOMINATIVE.—Substantive Masculine—*céle* (a companion, husband), Wb. Sg.; *duine* (a man), Wb.; *dalte* (a disciple), etc.

Subs. Neut. (I give examples only of such as are met with the article), *anesseirge* (the resurrection), Wb. 30^b; *atríde* (trinitas), *acetharde* (four), Wb. *cumachtae* (power), Sg. 6^a.

Adjectives. Masculine. *céetne fer* (first man), Wb. 7^b; *intathir nemde* (the Heavenly Father), Wb. 4^b; derivative adj. in *de, te, the*, are of frequent occurrence.

Adjectives. Neut. *anúile* (all), *anúilese* (all this), Wb. 16^b; *ní nuae ndo anatrabsin* (this possession is not new to him), Ml. 17^b.

GENITIVE.—Subst. Masc. *corp induini* (the man's body), Wb. 12^a.

Subst. Neut. *claar cridi* (table of the heart), Wb. 15^a; *comalnad soscéli* (fulfilment of the Gospel).

Adj. Masc. *comalnad indhuili recto* (fulfilment of all the law), Wb. 20^a.

Adj. Neut. *áinsid cetni díul* (accusative of the first declension), Sg. 91^b.

DATIVE.—*-u* occurs frequently instead of *-iu*.

Subst. Masc. *do duiniu* (to the man), Ml. 20^d; *donduíni* (to the man), Wb. 4^b.

Subst. Neut. *dondédiusin* (to these two), Wb. 9^c; *hi farcridiu* (in your heart), Wb. 5^d; *In esseirgu*, in *heseirgiu* (in resurrection), Wb. 4^b 13^b; *iarnesseirgiu* (after resurrection), Wb. 3^c.

Adj. Masc. *donchoimdid nemdu* (to the Heavenly Lord), Wb. 27^c.

Adj. Neut. *far cétnu díull* (in the first declension), Sg. 90^b.

ACCUSATIVE.—Subst. Masc. *imfolngi induine firian*, *imfolngi induine slán* (facit hominem justum, salvum), Wb. 4^d.

Subst. Neut. *ní dilgaid anancride* (you forgive not the spite), Wb. 9^c; *predchimmi soscéle* (we preach the Gospel), Wb. 14^c.

Adj. Masc. *lasinnathir nemde* (with the Heavenly Father), Wb. 19^d.

Adj. Neut. *cen imdibe stóride* (without bodily circumcision), Wb. 2^d.

VOCATIVE.—Subst. and Adj. Mas. *a iudidi* (O Jew!), Wb. 1^d; *a mār thormachtai* (gl. macte, magis aucte) Sg. 76^a.

PLURAL.

NOMINATIVE.—Subst. Masc. *comarpi* (co-heirs), Wb. 19^c.

Subst. Neut. *-e* in Nom. and Acc., *ataat ilchenéle* (there are many kinds), Wb. 12^d.

Adj. Masc. *dé nemdai* (heavenly gods), Sg. 39^a.

Adj. neut., *na accobra colnidi* (the carnal desires), Wb. 20^c.

GENITIVE.—*buáid innam miled talmande* (victory of the worldly soldiers), Wb. 11^a.

DATIVE.—*donab huilib doinib* (to all men), Sg. 189^b.

ACCUSATIVE.—Subs. Masc. *friarceiliu* (against our companions; *i. e.* against others), Wb. 33^b; *eter dóini* (amongst men), Wb. 28^b.

Subst. Neut. same as Nom.; *ruchualatar ilbéltre* (they heard many tongues), Wb. 12^d.

Adj. Masc. *farnuili baullu* (all your limbs), Wb. 3^b.

Adj. Neut. *na huli dorigniussa* (all that I have done), Wb. 24^b.

VOCATIVE.—No instances occur for this series in the MSS. Elsewhere, however, the Voc. plural agrees with the Acc.; and here it may be fixed for the masc. *-iu*, and for the neut. *-e, -i*.

II. SERIES.—Internal inflection, whereby in several cases, especially the Gen. Dat. sing. and Nom. plural, the signs of the cases—*i* and *u*—either accompany or suppress the final radical or derivative vowel. The vowels which are most frequently so affected are *a* and *e*. *A* in those cases either becomes *ai* (*oi, ui*) and *au*, or disappearing leaves the *i* and *u*. But *e* with *i* and *u* becomes *i* and *iu*. The vowels *o, ó, á*, of more rare occurrence, and sometimes *a* in position, never admit of *u* by their side, but with *i* they become *oi* (*ui*) *ói, ái*; *é*, for which *éu* is sometimes found, with *i* becomes *eúi, íui, éoi*; with *u* *iu*; *ói* and *ái* are nowhere changed. Substantives and adjectives neuter take *a* in the nom. acc. voc. plural.

SINGULAR.

NOMINATIVE.—Subs. Masc. *inball* (the limb), Wb. 12^b; *inmacc* (the son), Wb. Sg. *infer* (the man), passim.

Subst. Neut. *anaccobor* (the will, desire), Wb. 3^d; *anderbad* (the certainty), Sg. 90^a.

Adj. Masc. *inspirut nóib* (the Holy Ghost), Wb. 4^a; derivatives in *ach*, *ech* are very frequent.

Adj. Neut. *atir romanach* (the Roman land).

GENITIVE.—Subs. Masc. *ainm thríuin* (a hero's name), Sg. 96^a; *di muntir Cessair* (of the family of Cæsar), Wb. 24^b.

Subst. Neut. *imchloud diúll* (change of declension), Sg. 31^b; *recht naicnid* (law of nature), Sg. 217^b.

Adj. Masc. *isinannim inspiruto nóib* (in the name of the Holy Ghost), Wb. 9^c.

Adj. Neut. *asainreth indanma dilis* (that is peculiar to a proper name).

DATIVE.—Subs. Masc. *dondaum* (to the ox), Wb. 10^d; *dofíur*, *donfíur*, *do óen fíur* (to the man, to one man), Wb. 10^b, 11^c, 21^a.

Subst. Neut. *far cétnu diúll* (in the first declension; diall), Sg. 90^b.

Adj. Masc. *on spirut nóib* (from the Holy Ghost), Wb. 14^c. Adjectives in *ach* are not changed: *donbráthir híressach* (to the faithful brother), Wb. 10^b.

Adj. Neut. *ar anmainum dílius* (for a proper name), Sg. 27^a.

ACCUSATIVE.—Subst. and Adj. Masc. *ar óen fer* (for one man), Wb. 4^b.

Subst. and Adj. Neut. *ataidlech* (the satisfaction), Ml. 23^a; *cen saithur* (without labour), Wb. 27^b.

VOCATIVE.—*á fíur* (oh man!), Wb. 10^a.

PLURAL.

NOMINATIVE.—Subst. Mas. *adimmaice* (you are sons), Wb. 9^a. *Itcorp inboillsin* (these limbs are a body), Wb. 3^b.

é is changed, as in gen. sing.: *asberat mo beíúil* (my lips say), Wb. 12^d.

Adj. Masc. *sláin* (saved, *slán*), Wb. 28^b; *adib íressich* (you are faithful), Wb. 12^d.

Subst. and Adj. Neut. differ by the termination *a*: *átércitla* (their prophecies; *tercítal*) Ml. 19^b.

Adj. Neut. *cecha dethidnea domundi* (all worldly cares), Wb. 3^d.

Final *i* is also met, especially in derivatives: *itsaini inna rinn* (there are different stars), Ml.; *íslí* (gl. sunk, stars) Cr. 18^b; *íslí doibsom infechtá innahí rúp-tar ardda dunnai* (those [stars] are now low for them, which were high for us), Cr. 18^b.

GENITIVE.—Subst. Masc. *írchre fíatho román* (the decline of the Roman Empire), Wb. 26^a. *Riagóil sengrec* ([the] rule of the old Greeks), Sg. 1^a.

Subst. Neut.: *airitiú na forcétalsin* (the reception of these doctrines), Wb. 16^a.

Adj. Masc. *esseirge innanuile marb* (the resurrection of all the dead), Wb. 13^d; *indobál inna nóib innim* (the glory of the saints in Heaven), Wb. 13^c.

Adj. Neut. *foragab duaid inna anman adiecta cen tabairt anman trenfriu* (David assigned to them nouns adjective, without the addition of appellatives), Ml. 30^a.

DATIVE.—*Donaib ballaib ailib* (to the other members), Wb. 12^b.

ACCUSATIVE.—Subst. Masc. *farnuili baullu* (all your members), Wb. 3^b.

Adj. Masc. *la marbu* (with the dead), Wb. 25^b.

Subst. and Adj. Neut., same as in the nom. *fodainimse innmetha* (I suffer tribulations), Wb. 23^b.

VOCATIVE.—Subst. and Adj. Masc. *a Rómanu* (oh Romans!), Sig. 41^b; *a Galatu burpu* (oh foolish Galatians), Wb. 19^b; *a Judeu et geinti híreschu* (oh Jews and faithful Gentiles), Wb. 3^a.

Adj. Neut. *inna anman adiecta* (the nouns adjective), Ml. 30^a.

III. SERIES.—Of nouns externally inflected, except the dat. sing., in which the internal *u* occasionally appears. Endings peculiar to this series, besides the *u* just mentioned, *ib* dat. plural, and *u* acc. and voc. plural, are: *-o* gen. sing. for which *a* is of frequent, and *e* of rare occurrence; *-a* nom. pl., for which *-e* and *-i* are also met with; *-e* gen. pl.: neuter substantives do not take an ending in those cases of the plural which differ from the masculine, but present their

naked form. I have met with no adjectives of this series, unless it happens that *tualang*, pl. *tuailnge* (gnari)¹²⁷, be one, Wb. 17^b.

SINGULAR.

NOMINATIVE.—Sub. Masc. *bith* (the world); *mug* (a slave), Wb. And derivatives in *as*, *chas*, *ad*, *id*, *thid*, *ud*, *igud*.

Subst. Neut. *atir* (the Earth), Sg. 33^a.

GENITIVE.—Masc., *innetha inbetho* (tribulations of the world), Wb. 14^b; *mórad dagguíno* (magnifying of a good deed), Wb. 6^a.

Neut., *ainm renda* (name of a constellation), Sg. 73^a.

DATIVE.—Masc., *isinbiuthso* (in this world), Wb. 12^d; *do mórad dá* (to the magnifying of God), Wb. 15^c.

Neut., *di thir* (of the Earth), Wb. 9^b.

ACCUSATIVE.—Masc., *tri óen pheccad* (through one sin), Wb. 3^a.

Neut., *crenas tír* (who purchases land), Wb. 29^d.

VOCATIVE.—I do not know an example of the vocative of this series.

PLURAL.

NOMINATIVE.—Masc. *adib mogæ* (you are slaves), *mogi sidi uili* (these are all slaves), Wb. 3^b. 7^d. The ending *i* is only found in sub. masc. in *-id*, *-thid*: *foglinthidi* (disciples) 13^a.

Neut., *itsaini inna rinn* (there are different stars), Ml.

GENITIVE.—*lóg apecthe* (the reward of their sins), Wb. 1^c.

DATIVE.—*diamogaib* (to his slaves), Wb. 22^d.

ACCUSATIVE.—Mas., *na dánu diadi* (the divine gifts), Wb. 28^c.

Neut., *inna münd* (gl. insignia, celebramus nostræ redemptionis), Cr. 41^c.

VOCATIVE.—Does not occur; by analogy, *bithu*, *gnimu*, etc.

IV. SERIES.—Of nouns fem. externally inflected, ending in *-e* and *-i*, and, therefore, corresponding to mas. and neut. nouns of the first series in *-e*, *-i*, and *-u*.

SINGULAR.

NOMINATIVE.—Masc.: *láne*, *lanæ* (fulness), Wb. 26^d, 27^a; *fírinne*, (truth) Wb. 2^d.

Adj. *fírinne rectide* (righteousness of the law) Wb. 24^a.

GENITIVE.—*Maicc soilse* (sons of light), Wb. 25^c.

Adj. *hí foirciunn na cetnæ rainne* (at the end of the first part), Sg. 18^b.

DATIVE.—Subst. *co failti* (with joy), Wb. 24^b.

Adj. *icomairbirt núidi* (in understanding the [New Testament]), Wb. 3^c.

ACCUSATIVE.—Subst.: *cen fírinni* (without truth), Wb. 2^a.

Adj. *tresinful spirtaldi* (through the spiritual blood), Wb. 20^d.

PLURAL.

NOMINATIVE.—Subst. *cit sochudi* (though there be many), Wb. 4^d.

Adj. *inna ranna aili* (the other parts), Sg. 22^a.

GENITIVE.—Subst. *do airbirt biuth inna túaresin* (to enjoy this food), Wb. 10^c.

Adj. *etarene narúun diade* (knowledge of the divine mysteries), Wb. 26^c.

DATIVE.—*Ibartolaib* [*Inbartolaib*?] *marbdib* (in your mortal wills), Wb. 3^b

ACCUSATIVE.—Subst. *inna lobri* (the infirmities), Wb. 6^c.

Adj. *adciamni na rúna diadi* (we perceive the divine mysteries), Wb. 12^c.

V. SERIES.—Of nouns fem. inflected both externally and internally, and corresponding at once to Series II. and III. mas. and neut. Special vowel endings are: *-e* in gen. sing., *-a* in nom. and acc. pl.; besides internal *-i* in dat. and acc. sing., if the last syllable admit of the insertion.

¹²⁷ [Tualaing properly means able, competent.]

SINGULAR.

NOMINATIVE.—Subst. (of frequent occurrence in the codices): *ess, iress* (faith), *nem* (Heaven), *lám* (the hand), etc.

Adj. also numerous: *serc mór* (great love).

GENITIVE.—Subst. *tuag nime* (rainbow), Sg., 107^b.

Adj., *airde serce móre insin* (this is a sign of great love), Wb. 24^c.

Instead of *-e*, the regular case-ending, *-o* and *-a* occur (or *vice versa* *-e* for *-o*, *-a* in Series III. mas. and neut.), whether by affinity or dialectical variety; *luct inna æcolsa* (those who are of the church), Wb. 12^b.

DATIVE.—Subst., *isindinducbáilsin* (in this glory), Wb. 4^c; *isinbliadinsin* (in this year), Cr. 32^b.

Adj., *o laim deiss* (on the right hand), Sg. 17^b.

ACCUSATIVE.—Subst., *tri hiris* (through faith), Wb. 2^c; *pridchossa hiris* (I preached the faith), Wb. 7^b; *fri toil dé* (against the will of God), Wb. 4^c; *fri etáil* (against Italy), Wb. 6^d.

Adj., *isarnach nindocbáil móir* (it is for every great glory), Wb. 23^b.

VOCATIVE.—*A nóib ingen* (oh holy virgin! gl. marg.), Sg. 112^a.

PLURAL.

NOMINATIVE.—Subst., *láma et cossa* (hands and feet), Wb. 12^b; *na bretha* (the judgments), Wb. 17^b, *inna ranna* (the parts), Sg. 22^a, 26^b; *na briathrasa* (these words), Wb. 28^c. *-e* and *-i* also occur in many, as the result of assimilation: *octidélbæ andsom* (gl. sunt formæ octo), Sg. 166^a; *na litre* (the letters), Sg. 10^a; *inbértar epistli uáin* (shall the letters be sent from us?), Wb. 15^a; *athissi* (gl. confusions; sing. nom. *aithiss*, Wb. 13^b, compos. ut *iress*?) Wb. 29^b; *teora bliadni* (three years), Cr. 32^b.

Adj. in *-a*: *béisti olca* (evil monsters, or reptiles), Wb. 31^b. Adj. in *-i*: *itne-phchumscaichti na teora litres* (these three letters are unchangeable), Sg. 10^a.

GENITIVE.—Subst., *etarcne naráun* (knowledge of the mysteries), Wb. 26^c.

Adj., *inna teora litér* (of the three letters) Sg.

DATIVE.—*Hó lámuib* (from hands), Wb. 9^a; *donaib teoraib personaib uathataib* (of the three persons singular), Sg. 186^a.

ACCUSATIVE.—Subst., *adciamni na rúna* (we perceive the mysteries), Wb. 12^c; *fri tola inbetho* (against worldly desires) Wb. 29^a.

Adj., *nígette* [*nígente*?] *na brithennachta becca* (you would not form slight judgments), Wb. 9^c.

Subst. and Adj. in *-i*: *acosmiligmeir déli ecsamli* (we compare things dissimilar) Sg. 211^a.

VOCATIVE.—*ni riccim forless a chossa* (I require not your aid, oh feet!), Wb. 12^a.

SECOND ORDER.

Nouns of this class end for the most part in consonants, or rather have in some cases consonantal endings which, being originally, no doubt, derivative, show traces of an internal derivative inflection, with the mutable vowels *a*, *e*, and *i* preceding the final consonant. The final consonants are the liquids *m*, *n*, *r*, and the mutes *d*, *ch*, which with the internal vowels form a series of terminations—*ir*, *ar*, *ir*; *in*, *an*, *in*; *id*, *ad*, *id*, etc. The one series of the substantives in *-m* and *-im*, which I place first, developes certain special forms. If *e* appears instead of *a*, two divisions arise: (a) *an*, *in*, *ad*, *id*; (b) *en*, *in*, *ed*, *id*. Which discrepancy of vowels can scarcely be ascribed to assimilation, in the face of such forms as *senman*, *menman*, *foirbthetad*, *orpamin*, and others.

Examples of the liquid series (I.) (II.) (III.): *ainm* (a name), *béim* (a stroke), *menme* (the mind), *dítu dítiu* (a roof), *athir* (a father).

Examples of the mute series (IV.) (V.) *druoid* (a Druid), *cathir* (a town).

I. SERIES.		II. SERIES.		III. SERIES.
a. b.		a. b.		
Sing. Nom.	ainm béim	menme ditiu	athir	
Gen.	anma béme	menman diten	athar	
Dat.	anmim bémim	menmin dítin	athir	
Acc.	ainm béim	menmin dítin	athir	
Plur. Nom.	anman bémén	menmin dítin	athir	
Gen.	anman bémén	menman diten	athre	
Dat.	anmanib bémnib	menmanib dítuib	athrib	
Acc.	anman bémén	menmana dítne	athru	

		IV. SERIES.	V. SERIES.
		a. b.	
Sing.	Nom.	druid fili	cathir
	Gen.	druad filed	cathrach
	Dat.	druid filid	cathir
	Acc.	druid filid	cathrich
Plur.	Nom.	druid filid	cathrich
	Gen.	druad filed	cathrach
	Dat.	druidib filidib	cathrichib
	Acc.	druida fileda	cathracha

I. SERIES consists of some substantives in *im*, *m*, taking in the gen. sing. *-a* or *-e*; in the dat. *-im*, with duplicated *m*; and in the plural either *an* or *en*, these two endings forming two distinct classes. In the first (a), the noun *ainm*, of constant occurrence, is proved to be of the neut. gender, from the passage (Sg. 56^b): *asidirruidig. anainmsin*¹²⁸ (this noun is derived). Of the same gender, no doubt, are all other nouns of this form. Of the second class (b) but few examples occur, and these not uniform. There is no instance of a vocative in this or any of the other series.

SINGULAR.

NOM.—(a) *ainm*, *ainmm* (a name), Wb. Sg. passim.

(b) *béim* (a blow), *ingreim* (persecution), Wb. 18^a.

GEN.—(a) *indanma dilis* (of the proper name), Sg. 26^b; (b) no example found in the codices.

DAT. (a) *isinanmim inchoinded ihu. cr.* (in the name of the Lord Jesus Christ), Wb. 9^c.

(b) *ocmingrainmaimse* (at my persecution), Ml. 33^a.

ACC.—(a) *cen ainm* (without a name), Sg. 211^a.

(b) *ní agathar áingreim* (his persecution is not dreaded), Wb. 1^a.

PLURAL.

NOM.—(a) *asbertar ananman* (their names are mentioned), Wb. 28^a.

(b) *bémén digle* (strokes of revenge), Wb. 17^d.

GEN.—(a) *diall nanmann* (declension of nouns), Sg. 27^a.

(b) *foditiu nan ingremmen* (endurance of the persecutions), Wb. 23^c.

DAT.—(a), *inanmanaib lait.* (in Latin names), Sg. 6^a; (b) no example known; *bémnib* in the table is, therefore, hypothetical.

ACC.—(a) *tre anman* (by nouns), Sg. 29^a.

II. SERIES.—Consists of nouns taking in the oblique cases *an*, *in*, and *in*, *en*, whence two divisions. To the first belong derivatives in *-min*, *-man*, *-mn* (which is reduced, however, in the nominative to *-me*, or *·m*

¹²⁸ [Uncontracted form *asidirruidigthe anainmsin.*]

only), to the second belong derivative nouns in *-in* which in the same manner in the nom. becomes *-iu*, *-u*. In the oblique cases singular, likewise, especially the dative, other curtailed forms are found by the side of the fuller. These fuller forms of derivatives appear in the case of secondary derivatives: *menmnihi* (gl. dissensiones, from the sing. *menmniche*; *menme*), Wb. 18^a; *bríthemnacht*, *bríthemnact* (judgeship), Wb. 6^b; *bríthemandu* (gl. judiciali, from the nom. *bríthemande*—*bríthem*), Ml. 26^c; *anmande* (pertaining to the soul—*anim*), Wb. 13^d; *talamde* (pertaining to the earth—*talam*), Wb. 3^d; *noidenacht* (infancy—*noidiu*, an infant), Wb. 24^d; *caintoimtenach* (well-thinking—*toimtiu*), Ml. 31^b; *ermitnech* (gl. reverens—*ermitiu*), Ml. 32^b. For the vowels *a*, *e*, *i* add *brátharde*, brotherly, from *bráthir*.

To the second division (b) of this series belong numerous feminine nouns in *tu*, derived from verbs (*tu* for *tíu*, not to be confounded with masculines in *-tu*, gen. *-tad*, of the fourth series, and derived from adjectives). There are other feminines of the second class in *-tíu*, and in *siu*, derived also from verbs. In the first division are met both masculines, as, *bríthem*, and feminines, as, *talam*, *anim*.

SINGULAR.

NOM.—(a) *isbeo indanim* (the soul is living) Wb. 4^a.

(b) *toimtiu* (supposition), Wb. 23^a.

GEN.—(a) *rosc fornanne* (eye of your soul), Wb. 21^a.

(b) *dliged remcaissen*, *dliged remdeicse*n, (law of Providence), Ml. 19^d, 27^d.

DAT.—(a) *inim et talam*, *inim et italam* (in Heaven and Earth), Wb. 21^a.

(b) *oc tuiste dúile* (at the creation of the elements, i.e., of the world), Wb. 5^c.

ACC.—(a) *accobor lammenmuin* (desire in the mind), Wb. 3^d.

(b) *nertid arfrescinni* (he strengthens our hope), Wb. 5^d.

The final *iu*, *u* of the nom. seems to have disappeared from some nouns in *t*, as, *fortacht* (help) Ml. 1^a; *bendacht* (benediction), Sg.

PLURAL.

NOM.—(a) *matuhé ata horpamin* (if these be heirs), Wb. 2^c.

(b) *derbaisndisin* (the very pronunciations), Sg. 3^b.

GEN.—(a) *do ícc anman sochuide* (for the salvation of many souls), Wb. 24^d.

(b) *dealliguth innan iltoimddensin* (in right of these many opinions), Sg. 26^b.

DAT.—(a) *diarnanmanaib* (for our souls), Wb. 24^d.

(b) *huafóisitnib* (from confessions), Sg. 33^a.

ACC.—(a) *aforcital iccas corpu et anmana* (the doctrine which heals bodies and souls), Wb. 30^d.

(b) *for genitne* (by genitives), Sg. 45^a.

III. SERIES.—Of nouns of relationship, mas. and fem. in *-ir*, there is but one class, as *e* never occurs for *a* in the interior.

SINGULAR.

NOM.—*Athir* (father), *máthir* (mother), *bráthir* (brother), Wb. Sg. passim.

GEN.—*Bráthir athar* (gl. father's brother), Sg. 56^a.

DAT.—*Donduthir* (to the father), Wb. 13^b.

ACC.—*Lasinnathir nemde* (with the Heavenly Father), Wb. 19^d.

PLURAL.

NOM.—No instances in the codices, *athir* by analogy.

GEN.—*Maic indegaid anathre* (sons after their fathers), Wb. 30^b.

DAT.—*Uambraithrib* (from their brothers), Wb. 33^d.

ACC.—Does not occur. I supply mas. *athru*, *bráthru*—fem. *máthra*.

IV. SERIES.—Of derivatives in *-id*, forming in the oblique cases by the variation of the internal vowels two divisions (a) *ad*, *id*; (b) *ed*, *id*. To the first belong very frequent nouns in *-u*, shortened from *-id*, as above, *-u*, *-iu*, from *-in*. The ending *id*, has been preserved only in the word *druid*, in the others becoming *-e*, as: *tenge* (a tongue), *ume* (brass). The terminations of the second class have also become in the nom. *-iu*, *-i*, or *-e*. The full form of the derivatives here also, as in the second series, is apparent from nouns and adj. of secondary derivation: *filedacht* (poetry; *fili*, gen. *filed*), Sg. 213^a; *óigedacht* (hospitality, *ogi*) Wb. 26^b; to which I add, *Tenedon* (*tene*, *tened*), a Gaulish topographical name. Further *traigthech* (gl. pedester; *traigid*, Wb.) Sg. 38^b, 50^b.

The nouns of both divisions are masculine.

SINGULAR.

NOM.—(a). Abstract Nouns in *u* from adjectives are very frequent. The ending is either *-u* simple, or the fuller *-atu*, *-etu*.

Adj. of different form taking *-u*: *artu* (height), = *arddu*, *ardu* (from *art*, *ardd*, *ard*); *domnu* (depth, from *domun*) Incant. Sg. So also *-atu*, *-etu*: *dánatu* (daring) Sg. 90^a.

Adj. in *-ide*, *-de*, *-te*, taking *-u*: *óentu* (unity, adj. *óente*, *óende*, Wb. 7^c); *corpdu* (corporality, adj., *corpde*), Wb. So also, *-atu*, *-etu*: *fliuchaidatu* (humidity, adj., *fliuchaide*), Cr. 18^c; *foirbthetu* (firmness), Wb. passim.

(b) *cóimdiu* (Lord), Wb.; *tene* (fire), Sg., 69^b.

GEN.—(a) *tech nebmabthath* (house of immortality), Wb. 15^c.

(b) *bandea tened* (goddess of fire, Vesta), Sg. 53^a.

DAT.—(a) *ondnephpiandatu* (from the impunity), Ml. 28^a.

(b) *do filid* (to a poet), Sg., 14^a.

ACC.—(a) *cen torbatid* (without utility), Wb. 12^d.

(b) *lassincoimdid* (with the Lord), Wb. 25^b.

PLURAL.

NOM.—(a) *dorigénsat druid* (druids made), Wb. 26^a.

(b) *intan labratat indfilid* (when the poets speak), Sg. 162^a.

GEN.—(a) from the Irish Annals: *Muireduc na tengad* (Muiredach [professor] of the languages) Tigern. ap. O'Con. 2, 275.

(b) *dolbud filed* (poetic fiction), Sg. 71^b.

DAT.—*secndupthib* (to the agents), Wb. 19^d.

ACC.—(a) *lasna filedasin* (with these poets), Sg. 63^b.

V. SERIES.—Of certain feminine nouns in *-r*, to which are added the suffixes *-ach*, *-ich*, *-ig*. The cases, though not all, of the noun *cathir* (a town), are met with in the codices, and the same declension is followed by *nathir* (a serpent) with the article in Sg.: *indnathirsin* (gl. natrix, i. e. serpens hic) 69^a. and doubtlessly by others in *ir*. Vestiges of this formation appear to have been preserved in the modern Irish: *caora* (a sheep, old form: *cáir*, *céir*?) Gen. *caorach*, pl. nom. *caoirigh*. gen. *caorach*, dat. *caorchaibh*, voc. (acc.) *caorcha*. It is certainly preserved in some others in *ir*, as: *láir* (Old Irish *láir*, a mare, Sg. 49^b=*lí-ir*), *lasair* (a flame), gen. *lárach*, *lasrach*, pl. *láracha*, *lasracha*. Here, also, the derivative *ch*, appears in the adj. *cáirchuide*, Sg. 37 (ovine); compare the Gaulish name *Caeracates* in *Tacitus*, and perhaps also *Caracalla*, the name of a Gaulish robe, (for *caeracalla*?), it is wanting, however, in *trechatharde* (gl. tripolites), Sg. 38^b.

SINGULAR.

NOM.—*Cr. dim [din] issí inchathir* (therefore Christ himself is the city), Wb. 21^c.

GEN.—*aitribtheid inna cathrach asb. tibur* (gl. *Tiburs*: an inhabitant of the town which is called Tibur), Sg. 124^b.

DAT.—One would expect *-ich, -ig*, by analogy, but the contracted form of the nom. obtains in Wb. 13^b: *robói issinchaithir* (he was in the city).

ACC.—*Romuil dofórsat incathraig* (Romulus founded the city), Sg. 31^b.

PLURAL.

NOM.—*ilchathraig* (many cities), Sg. 13^a.

The other cases must be supplied: Gen. *cathrach*. Dat. *cathrichib* (or *cathrib*?) Acc. and Voc. *cathracha*.

The Dual Number.

After the twofold formation of the Irish declension, we may here add a few words concerning this number, on account of the small number of examples furnished by the codices for all the series given above. It does not, of itself, denote two persons or things, as for instance in Greek, but constructed with the numerals *dá, di, dib*, it presents in the language of our codices mixed sing. and pl. forms, relies no doubt of more ancient forms peculiar to this number.

The only form of the article in any case or gender, is, *in* before *d*, the initial letter of the numeral, which in one of the following examples is written *dd*, hard.

We shall give, first, paradigms of the series of the *first order*, and then such examples as occur in the codices. The forms enclosed in brackets are hypothetical, or formed by analogy.

MASC. AND NEUT.

I. Series.	II. Series.	III. Series.
Nom. céle (i?)	ball	bith
Gen. céli	(baill) ¹²⁹	betho
Dat. célib	(ballib)	bithib
Acc. céle	ball	bith

FEMININE.

IV. Series.	V. Series.
Nom. tuari	rainn
Gen. tuare	rann
Dat. tuarib	rannib
Acc. tuari	rainn

I. SERIES.

NOM.—The Nom. Masc. appears to occur in the adj. *dadruith ægeptacdi* (two Egyptian Druids) Wb. 30^c.

Neut. *indagné* (the two forms), Sg. 168^a.

GEN. and DAT.—Gen. and dat. are not met.

¹²⁹ [XXXV. Rectè *ball*, which aspirates,* must, therefore, have had a vocalic auslaut (*-ō -au*?) and so cannot possibly be (as Ebel supposes, On Decl. in Irish, §. 10 On the Celtic Dual, p. 85) identical with the gen. plur.]

* We say (e.g.), *athair an dá mac fhionn* (father of the two fair sons), *cailleach an dá adharc fhionn* (hag of the two white horns).

ACC.—Masc. or Neut.: *dobir dasale. dabir imduda are* (ἄπαξ λεγόμενα)
Incant. Sg.¹³⁰

II. SERIES.

NOM.—Masc.: *da mod*, (two moods) Sg. 138^b.

Neut.: *comesatar da cenél indib* (gl. two genders are mixed up in them), Sg. 61^a.

GEN.—Of the gen. no instances.

DAT.—Neut.: *frisgair intestimínse doñdib dlígédib remeperthib* (this testament answers to the two previous laws), Sg. 193^b.

ACC.—*imbir indamér* (ply the two fingers), Incant. Sg.

III. SERIES.

NOM.—*biet da atarcud and* (there will be two relations there), Sg. 198^b.

GEN.—*Cechtar da líno* (either of the two parts), Sg. 162^b.

DAT.—*Coms. ó dib nógaib* (composed of two parts), Sg. 98^a.

ACC.—*Andiall foadanóg* (the declension in both its parts), 98^a. Sg.

Neut.: *indá érrénd* (gl. stigmata, porto), Wb. 20^d.

IV. SERIES.

NOM.—*It digutai bíte indeog*. (there are two vowels in a diphthong), Sg. 18^a.

GEN.—*Fogor dagute indeog*. (the sound of two vowels in a diphthong), Sg. 18^a.

DAT.—Evidently *do dib guttib*.¹³¹

ACC.—Adj. in Sg. 74^b, *indí rainn ingráidí* (into two intelligible parts).

V. SERIES.

NOM.—*Dí húair* (two hours), Cr. 31^b.

GEN.—*Cechtar indarann* (either of the two parts), Sg. 74^b.

DAT.—*Ní chen dlígéd anephdiáll ó dib rannaib* (gl. alteruter, alterutritus non absque ratione non declinatur; i. e. non declinatur e duabus partibus), Sg. 75^a.

ACC.—*Coitchenaso etir dí árim* (common to two numbers), Sg. 72^a.

Duals of the second order are very rare. The following are instances:—

Tuicsom inda nainmso (he understands these two names), Wb. 21^d; *da druith aegeptacdi* (two Ægyptian Druids), Wb. 30^c.

Anomalous Substantives.

Which do not follow a fixed rule and form like all those above enumerated, but have peculiar and shifting forms of their own. Of this kind are: *día* (God), *día* (a day), *duíne* (a man), *ben* (a woman), *ríg* (a king), *lá* (a day).

I. *Día* (God): sing. gen. *etargne ndæ* (knowledge of God), Wb. 21^a; dat. *ó día* (from God); acc. *fri día* (with God), Wb. 20^d; voc. *a dæe* (oh God). Wb. 5^b; plur. nom. *dé nemdai sôn* (Heavenly Gods), Sg. 39^a; dat. *do déib* (to the Gods), Sg. 39^b; acc. *tarsna deo* (by the Gods), Sg. 217^b; Fem. sing. *dea*,—in composition *bundea* (goddess), Sg. 60^a; plur. *bándæ* (goddesses), Sg. 53^b.

II. *Día* (day): *cach día* (daily), Wb. 13^c; *indiu, hündiu* (to day), Wb.; *fride, fridei* (by day); *día brátha* (in the day of judgment), Wb. 23^c.

III. *Duíne* (man)—the radical *ui* becomes *ói* in the plur.; sing. gen. *corp duíni* (a man's body), Wb. 12^a; dat. *donduíni* (to the man), Wb. 4^b; acc. *imfolngi induíne slán* (he saves man), Wb. 4^d; voc. *a duíni* (O man), Wb. 1^c; plur. nom. *indóini*

¹³⁰ [xxxvi. *Da sale is salivam tuam* (da for du, do); *im du da are*, “around thy two temples”; *are* (tempus capitis) gen. *arach*, is a c-stem. These examples are, therefore, improper.]

¹³¹ [xxxvii. Rather *do dib nguttib*, where *dib n*=the Sansk. *dwábhyaṁ*, Greek *δvoῖν* (from *δvoφιν*).]

bí (the living men), Sg. 39^a; gen. *icc incheneli dóine* (the salvation of the race of men), Wb. 26^a; acc. *coræ fri dia et dóini* (peace towards God and men), Wb. 20^d.

IV. *Ben* (woman)—interchanges with the forms *ban*, *mná*: *iccfe inmnái* (thou wilt heal the woman), Wb. 10^a.

V. *Ríg* (king): sing. gen. *itaig ríg* (in the king's house), Wb. 23^b; dat. *ainm diariú* (gl. Lar rex Vejentorum, *i. e.*, the name of their king), Sg. 64^a; plur. gen. *hi lebraib ríg* (in the books of kings), Ml. 30^b; acc. *conroibtis ocdenum rectche la ríga* (gl. volentes esse legis doctores, *i. e.*, to the kings), Wb. 28^a.

VI. *Lá* (day) is inflected from the forms *lá, lae*, and *laithe, lathe* (neuter). Sing. n. *alaithe*, Ml. 21^c; gen. *ammi maicc lui* (we are the sons of day), Wb. 25^c; dat. *illau báiss* (in the day of death), Wb. 29^c; acc. *fri laa brátha* (to doomsday), Wb. 29^a; plur. gen. *ar lín laithe* (in the number of days), Ml. 17^d.

(B) Diminutives.

Common to both subst. and adj., like the declension of the first order. The instances that occur, especially in codex Sg., present the following terminations, *-án*, *-én*, and *-that*, which are more usual in the mas. and neut., and *-éne*, *-ne*, *-nat*, *-net* in the fem.

Masc. and neut. AN in substantives: *duinán* (a mannikin), Sg. 47^b; *táidán* from *táid* (a thief), 47^b. In adjectives *becán* (gl. paullulus), Sg. 48^a; *trogán* (gl. misellus), 48^a.

Numerous old proper names have the same ending: *Tresan*, *Gibrian*, *Veran*, *Abran*, *Petran* (vita S. Tresani, Boll., Febr. 2, 53).

EN: *duinén* (mannikin), Sg. 45^a.

THAT: *sráthathat* (a sting), Sg. 47^a; *centat* (gl. capitulum), 47^a. CHAT, NAT, NET, are less frequent: *duinenet* (a mannikin), 45^b.

Fem. ENE: *laréne* (from *láir*, a mare), Sg. 49^b.

NAT in subst.: *siurnat* (gl. sororcula), Sg. 46^b; *talamnat* (gl. terrula), 48^a.

NET, NIT: *fochricnet* (gl. mercedula), Sg. 47^a; *tonnait* (gl. cuticula), 46^b.

(C) Degrees of Comparison.

Comparative and superlative. The forms of the first, in the old language, are the more copious, these are either regular or irregular.

COMPARATIVE.

Of this there are two forms, *-úthir*, *-iu*, *-u*,—the first of which may be compared with the Greek ὅτερος, and the second with the old Latin *-ios*, *-ius*, the *s* of which passed into *r*. Inflections are not found.

Ithir I have only met in one codex Wb., and in one passage 27^d: *islerithir*.

Iu and *u* are used indifferently, though the former is more usual in monosyllables, the latter in polysyllables. The particle *le* is often met after the comparative, corresponding seemingly to the Latin *eo*.

Iu: *níbia di mtaib bes huilliu inoensill* (there cannot be more of mutes in one syllable), Sg. 7^a; *lériu* (more industrious), 41^a; *semlu* (more slender), 14^b; *goiriu* (more pious), 40^b.

U: *oillu oldate cóiccet fer* (more than fifty men), Wb. 13^d; *isassu, ba assu* (easier), Wb. 15^c; *ata lobru* (that are weaker), Wb. 12^b; *gliccu* (wiser), Wb. 26^d; *istairismechu infer* (the man is firmer), Wb. 28^b. There are some anomalous comparatives either in *a*, which sometimes becomes *o*, or with peculiar forms of their own. Of the former the principal are:—*máa*, *máo*, *móa*, *móo* (greater), *messa* (worse), *nessa* (nearer), *tressa* (stronger). Besides *óa* (less), *lia* (more), *ire* (ulterior), *ferr* (better).

Máa from adj. *már* (great), for which *mór* also occurs. From the form *már* are produced *máa*, *má*, *máo*: *asmáu alailiu* (greater than another), Wb. 12^a. From *mór* are made *móa*, *móo*, *mó*: *móa léu sercc atuille* (greater with

them is the love of their own will), Wb. 30^c; *fresciu fogchricce asmóo* (hope of the reward, which is greater), Wb. 10^c.

Messa (worse): *fodnimid nech asnessa dúib* (endure one who is worse to you), Wb. 17^b; *creitmechsin asnessa ancreitmech* (this believer is worse than an infidel), Wb. 28^d.

Nessa (nearer): *isnesa do geintib* (he is nearer to the Gentiles), Wb. 2^b; *innahi ata nessa* (those which are nearer), Cr. 44^a.

Tressa (stronger): *combad tressa de híress apstal do fulung* (that the faith of the Apostles might be stronger to endure), Wb. 25^a; *ishé dim [din?] ambés adi intí dúib bes tresa orcaid alaile* (it is their habit that the stronger kill the weaker) Ml. 19^d.

The three following comparatives, on account of the verbs accompanying them regularly in the sing., appear to have been originally substantives, with a comparative signification. They also sometimes act as adverbs in their naked form.

Oa (less): *acoic indid oa q. xxx* (the five in it less than thirty) Cr., 33^b.

Lia (more, a greater number): *nabad lia diis no thriur dam* (let there be not more than two or three) Wb. 13^a; *ilíla sillaba o illitrib* (there are more syllables of many letters), Sg. 71^a.

Ire (ulterior): *aither. uí ashire oldáta m. ocus aui* (patronymics no further than sons and grandchildren), Sg. 30^b.

Ferr (better): *ní ferr nech alailiu and* (no one better than another there), Wb. 2^a; *nípat ferr de* (they are not better of it), Wb. 12^d.

In the majority of the foregoing examples, the particle *as*, preceding the comparative, is evidently the verb subst. 3 pers. sing. in dependent position. It is often, however, a different word, increasing the sense of the gradation, *ex. gr.* the comparative: *ní asse acleith rafitir aslia* (it cannot be easily concealed, many know it), Wb. 23^c, or of the superlative: *asmaam*. The meaning of comparative is still further increased by its repetition with the intervening formula *ass*: *corrop moo assa moo et corrop ferr assa ferr donimdigidesseirc* [*donimdigid desseirc*] *dé et comnessim* (so that it may be better and better, you increase your love of God and [your] neighbour), Wb. 23^b; *ferr asaferr* (better and better), Wb. 15^c.

SUPERLATIVE.

There are two endings, *-em* and *-am*, the former of adjectives which form their comparatives in *-iu -u*, the latter of anomalous adjectives ending in *a* in the comparative. Internal inflexion occurs in the forms ending in *am*.

Em: *faillsem* (most clear, lucid, from *follus*, open, clear), Cr. 40^a; *tóisigem* (the first; in the verse: *primus de Danaum magna comitante caterva*), Sg. 42^a.

The following are instances of the fuller form, *-imem, -ibem, -bem* after a double consonant or diphthong radical: *huaislinem* (the highest), Ml. 28^d; *itdoini saibibem dogniat inso* (they are most false men who do this,—from *saib* false, or properly delusive), Ml. 3^a.

Am: *oam* (the least), Wb. 13^b; *asmaam rosechestar arsidetaid* (it is he has reached as great an age as possible), Sg. 208^b, *ata nessam* (the nearest) Incant. Sg. *comnesnam* (the neighbour [lit. "nearest"], Ml. 36^a. Gen.: *desserc dé et comnessim* (love of God and (our) neighbour), Wb. 23^b. Dat.: *ho chomnesam* (from a neighbour), Ml. 36^a. Acc.: *galar bess fairechomnessam* (the disease which is over on his neighbour), Cod. Camar.; *athis forachomnesam* (reproach against his neighbour), Ml. 36^a.

II.—THE CELTIC MSS. UPON WHICH ZEUSS' GRAMMATICA CELTICA WAS FOUNDED; AND TABLE OF THE ABBREVIATIONS USED IN REFERRING TO THEM.

The following list of MSS. used by Zeuss in his *Grammatica Celtica*, and of the abbreviations he uses in referring to them, may be found useful to those who may not have that work:—

Irish MSS.

1. Codex Prisciani Sancti Galli (No. 904). A copy of Priscian preserved at St. Gall, and thickly interspersed with marginal and interlinear glosses. Zeuss denotes this MS. by Sg.

2. Codex Paulinus Bibliothecae nunc Universitatis Wirzburgensis—marked M. th. f. 12. An MS. containing the epistles of St. Paul, formerly belonging to the cathedral church of Würzburg, but now to the university. Zeuss refers this MS. to the eighth century; although smaller than the St. Gall MS., it exhibits the same copiousness of glosses, if not greater, as they accompany the text after the manner of a continuous commentary, less by single words (like the St. Gall MS.) than explaining the context of St. Paul by Irish sentences. Zeuss denotes this MS. by Wb.

3. Codex Mediolanensis bibliothecae Ambrosianae (marked C., 301, and denoted by Zeuss, ML), an MS. of St. Jerome's commentary on the Psalms, containing a mass of glosses, not less than the MSS. above mentioned. Zeuss agrees with Muratori and Peyron, that these commentaries were written by St. Columbanns, the founder of Bobbio, from whence the MS. was transferred in 1606. by Cardinal F. Borromeo, when he established the Ambrosian Library. Zeuss had only time to copy a small part of the glosses of this MS.

4. Codex bibliothecae Carlisruhensis (No. 83, denoted by Zeuss, Cr.), an MS. formerly belonging to the monastery of Reichenau, containing "Computus de signis XII. et intervallorum; Beda de ratione temporum". The text of Bede is interspersed with Irish glosses.

5. Codex Prisciani bibliothecae Carlisruhensis, No. 223, denoted by Zeuss, Pr. Cr., a MS. of Priscian, also formerly belonging to Reichenau. It contains much fewer glosses than the St. Gall one, with which it agrees in part, and in part differs.

6. Codex Sancti Galli (No. 1395), containing a collection of fragments from ancient MSS., made by Ildefonso von Arx, chief librarian. Folio 419, vol. II., has Irish formulæ of incantation, hence Zeuss denotes it by Incant. Sg.

7. Codex Civitatis Camaracensis (No. 619) an MS. belonging to the City of Cambray, containing the canons of an Irish Council held in 684; in one place in the middle of the book is preserved a fragment of an Irish sermon on self-denial intermixed with Latin sentences. The book was compiled for Alberic, Bishop of Cambray from 763 to about 790.

Welsh MSS.

1. The vellum MSS. in the Bodleian Library at Oxford,—Auct. F. 4-32, described by Wanley in his catalogue of Anglo-Saxon MSS. 2, 63. The parts which supplied material to Zeuss being: *a*, a part of the grammar of Eutychius,

with interlined Welsh glosses, from p. 2^b to 9^a; *b*, the exordium of Ovid's Art of Love, p. 37^a to 45^b, also containing interlined Welsh glosses. These glosses he believes to have been written in the eighth or ninth century. *c*, The alphabet of Nemnivus, giving the forms of the letters and their Welsh names; *d*, some accounts of weights and measures in Welsh, intermixed with Latin, at p. 22^b to 23^a.

2. A later vellum MSS. (Bodl 572), containing theological tracts, and in the middle, from p. 41^b to 47^b, a list of Latin words with Welsh ones, which are written either over the Latin, or in the same line, with the sign *i*. (*id est*), according to the custom of glossographers.

3. The MS. of the Church of Lichfield (formerly of that of Llandaff), containing the Gospels, in various parts of which (*e.g.* p. 9^b 10^b, 71^a, 109^b), donations made to the Church of Llandaff at very ancient periods, not later than the glosses of the first Oxford MS., are noted in Latin, but with Welsh names, and even sentences, which Wanley has already published (p. 289).

4. The Luxemburg Folio, a single leaf with Welsh glosses of the ninth century, which Mone found in the town library of Luxemburg, pasted to the cover of another MS.

The glosses of these four MSS. have been published by Zeuss in the appendix to the *Grammatica Celtica*.

5. *Liber Landavensis*, or book of Llandaff, compiled from more ancient documents about the year 1132. It contains many descriptions of boundaries of land, and also privileges of the bishopric, written in Welsh. It has also scattered through it Welsh proper names, especially of men and localities. This book was published in 1840 under the title, "The Liber Landavensis, *Llyfr Teilo*, or the Ancient Register of the Cathedral Church of Landaff", from MSS. in the Libraries of Hengwrt and of Jesus College, Oxford, with an English translation and explanatory notes by the Rev. W. J. Rees, published by the Welsh MSS. Society, Llandovery, 1840.

6. *Codex legum Venedotianus*, or the Venedotian MS. of laws. This MS., which belongs to the Hengwrt collection, is considered to have been compiled in the twelfth century. The latest edition of these laws, the first collection of which is attributed to Hywel Dda (Howel the Good), who died A.D. 950, was published by the Record Commission, under the title "Ancient Laws and Institutes of Wales"; comprising laws supposed to be enacted by Howel the Good, modified by subsequent regulations under the native princes prior to the conquest by Edward the First: and anomalous laws, consisting principally of institutions which by the statute of Ruddlan were admitted to continue in force. With an English translation of the Welsh text, 1841.

7. The Red Book of Hergest (*Llyfr coch o Hergest*), now in the Library of Jesus College, Oxford. It is the chief of all the MSS., preserving the middle forms between the old and the living languages. Turner determined this MS. to be of the fourteenth century. The principal narratives relating to the history of Arthur and his Knights of the Round Table, which it contains, were published in three volumes, under the title of "The Mabinogion, from the *Llyfr coch o Hergest*, and other Welsh MSS., with an English translation and notes, by Lady Charlotte Guest". London, 1849.

Cornish MSS.

1. The vellum MS. marked Vesp. A. 14, in the Cotton collection in the British Museum. It is the most ancient monument which is known to exist of the Cornish language, and dates most probably from the twelfth century. It has been transcribed by Zeuss himself, and printed entire in the *Grammatica Celtica*, vol. II. 1100. It is also printed, more correctly, and arranged alphabetically, by Mr. Edwin Norris, in the second volume of his Cornish Drama.

2. A Cornish poem on the passion of Christ, of which four copies are extant, Of these, one is in the British Museum, and two are in the Bodleian Library. Both Cornish text, and an English version made in 1682, were published in London in 1826, under the title "Mount Calvary, or the history of the passion, death, and resurrection of our Lord and Saviour Jesus Christ", written in Cornish -

(as it may be conjectured) some centuries past, interpreted into the English tongue in the year 1682, by John Keigwin, Gent., edited by Davies Gilbert. Mr. Whitley Stokes has recently published in the *Transactions of the Philological Society of London* (1862) a new and corrected edition of this poem, with a translation, which is a great boon, as the former edition was almost worthless.

Armoric MSS.

1. The Chartularies of the monasteries of Rhedon or Roton and Landevin. The former probably began at the end of the tenth or beginning of the eleventh century, and ended in 1162; and the second in the beginning of the eleventh century. Those which have been printed will be found in Courson's *Histoire des peuples Bretons dans la Gaule et dans les îles Britanniques*, Paris 1846, and Dom Morice's *Mémoires pour servir de preuves à l'histoire ecclésiastique et civile de Bretagne*.

2. The life of St. Nonna, or Nonita, a dramatic poem preserved in a paper MS., which was found by Marzinus, notary to the Bishop of Quimper, on his pastoral circuit, and presented by him to the editor. This MS., which Zeuss thinks belongs to the fourteenth century, has been published under the title: *Buhez Santez Nonn, ou vie de Sainte Nonne, et de son fils Saint Dey* (David) *Mystère composé en langue bretonne antérieurement au 12^{me} Siècle, publié d'après un manuscrit unique, avec une introduction par l'Abbé Sionnet et accompagné d'une traduction littérale de M. Legonidec et d'un facsimile du manuscrit*, Paris, 1837.

Abbreviations used in Dr. Ebel's Celtic Studies.

Irish words. All the Celtic words not specially distinguished by letters, whether quoted by Dr. Ebel or added to his lists, are Old Irish, and are taken from the Irish MSS. in the foregoing list. As the language of all of them is of about the same age—the eighth or beginning of the ninth century,—Ebel has not thought it necessary to indicate the particular MS. from which the word is borrowed.

Welsh words. Words taken from the Welsh MSS. 1, 2, 3, and 4 in the foregoing list, are indicated by W. 1; those from 5 and 6, by W. 2; and those from 7, by W. 3.

Cornish words. Words taken from the Cornish MS. 1 are indicated by V; those from MS. 2, by P.

Armoric words. All words taken from the Armoric MSS. 1 and 2 in the foregoing list, are indicated by the abbreviation Arm.

The other abbreviations used by Dr. Ebel are:

A.S.=Anglo-Saxon	M. Ir.=Middle Irish
Ch. Sl.=Church Slavonic	N.H.G.=New or Modern High German
Corn.=Cornish	O.H.G.=Old High German
Fr.=French	O. Ir.=Old Irish
Gaedh.=Gaedhelic	O.N.=Old Norse
Gaul.=Gaulish	O.S.=Old Saxon
Goth.=Gothic	Osc.=Oscan
Gr.=Greek	Pruss.=Prussian
Incant. Sg. refers to the Irish MS. No. 6	Sab.=Sabine
K.=Kymric	Slav. and Sl.=Slavonian
Lat.=Latin	Skr.=Sanskrit
Lett.=Lettish	Umbr.=Umbrian
Lith.=Lithuanian	Z. refers to Zeuss' Grammatica Celtica;
Med. Lat.=Mediæval Latin.	the numbers to the pages.
M.H.G.=Middle High German	

An * prefixed to a word indicates, as mentioned at Note 37, p. 60, that the word is hypothetical. The mark 2, used at p. 79 to indicate the degeneration of the case endings, is only an arbitrary sign.

INDICES VERBORUM TO POSITION OF THE CELTIC.

[The figures after the words, except where there is a special reference to a note, indicate the page; the italic letters after the figures refer to the columns,—*a* indicating the first or left hand column, and *b* the second or right hand column; where these letters are not found, the word occurs in the general text.

All the old Celtic and old Irish words which have been explained or analysed by Mr. Stokes in his *Irish Glosses*, are indicated by the letters *St.*; the numbers which follow those letters without the letter *p*, refer to the numbers in his commentary on that work; where the letter *p* precedes the figures, the latter refer to the page of that work.

The letters *C, l, w*, after a word, indicate that it is also to be found in the list of Latin loan words given at p. xx. of Mr. Stokes' edition of Cormac's Glossary, published by Messrs. Williams & Norgate, London, 1862. Whenever the word is spelled differently in Cormac from what it is in Zeuss, the word as spelled by the former is given in brackets.]

INDO-EUROPEAN, OR PRIMITIVE ARYAN.

akva, 113
agni, 119
antar, 108*b*
ava, 118*b*
avatya, 118*b*
as (*root*), 112
aina, 113
ghaima, 112
tautâ, 113
daiva, 113
dacru, 113
dant, 113

daru, 112
diva, 113
dus, 108*b*
dhâ (*root*), 112, 128
nava, 111*b*
navya, 111*b*
nâu, 108*b*
panca (pancan), 122
pra, 130
bhû (*root*), 112, 128
râd (?) (*root*), 110*b*
vaskara, 112

vid (*root*), 112
vidhavâ, 113
visha, 108*b*
vîra, 113
sak (*root*), 113
sâna, 113
sarpa, 109*a*
sâuala [?], 113
su-, 109*b*
sru (*root*), 112
svastar, 113

SOUTH ARYAN.

Sanskrit.

agni, 119
anu, 131
antar, 108*b*
an̄da, note 88, p. 112
ava, 118*b*, 120
as (*root*), 112
âyus, 109*a*
âvja, 113
jan (*root*), 110*b*
jñâ (*root*), 110*b*
tamas, 113
trna, 115*a*
dala, 122
dus-, 108*b*

dr̥ç (*root*), 113*a*
druh (*root*), 114*b*
dvâra, 121
dhâ (*root*), 112, 128
nava, 111*b*
navya, 111*b*
nâu, 108*b*
panca (pancan), 122
pibâmi (*Ved.*) 108*b*
pra, 130
bôdhayâmi, 117*a*
bhû (*root*), 112, 128
mahat, 121
lax (*root*), 118*a*
lap (*root*), 118*b*
vâta, 114*b*

vid (*root*), 112
vidhavâ, 113
visha, 108*b*
vîra, 113
vr̥hat, note 82, p. 97
vêda, 123
çru (*root*), 112
sarpa, 109*a*
su-, 109*b*
sru (*root*), 112
srôtas, 111*b*

Old Persian.

vazarka, note 82, p. 97.

NORTH-WEST ARYAN.

HELLENIC.

Greek.

ἀγάννιφος, 116*b*
* αἰασινχορος, 116*b*
ἄγχι, 109*a*
ἄγω, 107*a*

ἄελλα, 107*b*
ἄήρ, 107*a*
αἰών, 109*a*
Ἀφέλιος, v. ἥλιος, 112*a*
ἀκούσας, 129
ἀλέω, 111*a*

ἀλλάσσω, 107*a*
ἄλλομαι, 109*a*
ἄλλος, 109*a*
αλογία, 124
αλογος, 124
ἄλς, 111*b*

ἀμφι, 99a
ἀναπηδήσας, 129

ἀναστάς, 129

ἀνὴρ, 108b

ἀνοπλος, 124

ἀντί, 99a, 123

ἄοπλος, 124

ἀποβαλὼν, 129

ἀποκριθείς, 129

ατεκνος, 124

-ατος, 126

αὐχμός, v. σανχμός, 112a

αὐχμηρός, v. σανχμός,
112a

βάνα (*Boeot.*), 109b

βίος, 109b

βοῦς, 108a

βραχίων, 108a

βρέχω, 117a

γένεθλον, 110b

γεννάω, 110b

γέρας, 113a

γίγνομαι, 110b

γιγνώσκω, 110b

γράφω, 102b, 115a

γραῦς, 108b

γυναικός, 124

γυνή, 109b

δάκρυ, 110a

δαμάζω, 110a

δεδεμένον, 129

δεξιός, 110a

δέκω, 113a

δόρξ, 108b

δору, 110a

δρυς, 110a

δυσ-, 108b

εγγύς, 109a

ἔξ, 107b

ἔθος, 113b

εἶδαρ, 110b

εἶμι, 129

εἰναλος, 108b

ἐκάς, 109a

ἐκυρός, ἐκυρά, 111b

ἐλαβοι, 129

ἐλάσσων, 111a

ἐλμινς, 110a

ἐνη, 112a

ἐννεπε, 112a

ἐπομαι, 112a

ἐριον, 112b

ἐρπετόν, 109a

-ε, 124

ἐσπερος, 112b

ἐταῖρος, 112a

ἔταρος, 112a

εὔ, 109b

ζόρξ, 108b

ζυγός, 111a

ἥβη, 111a

ἥθος, 113b

ἡίθεος, 112b

ἡλιος, 112a

θαν (*root*), 122

θέος, 110a

θνητός, 122

θύρα, 110b, 121

ἴζω, 112a

ἰός, 108b

ἵππος, 110b

-ισσα, 124

καβάλλης, 110a

κάμπω, 110a

καρδία, 109b

κατεργασάμενον, 129

κεῦθω, 110a

κνήμη, 108a

κύων, 110a

λάβω, 129

λαγχάνω, 113a

λάιγξ, 108b

λαμβάνω, 129

λείχω, 111b

λίθος, 108b

λόγος, 124

λόγχη, 108b

λύσαντες, 129

μέγας, 121

μέδομαι, 108b

μέλι, 108b

μείς, (*Ion.*), 111a

μέμονα, 111a

μήλιος, 119b

μίσγω, 111b

μήν, v. μείς, 111a

μήτηρ, 111a

μύλη, 111a

ναῦς, 108b

νέειν, 108b

νεφέλη, 111b

νήθειν, 108b

ὀδοῦς, 110a

ὀδυνήφατος, 113b

οἶκος, 112b

ὀνομα, 107a

ὀκως, 231

ὀρθός (*Forthός*), 107b

-ος, 124

παλάμη, 111b

πατήρ, 109b

πέλεκυς, 104b

περιδερχής, 113a

περήσομαι, 113b

πέφνον, 113b

πλάτος, 111a

πλατύς, 111a

πλημυρίς, 111b

πῦρ, 119

πίοργος (*φοῦργος*), 113b

πῶλον, 129

ῥεω (*σρέFω*), 111b

σανκός, 111b

σανχμός, v. ανχμος, 112a

σανσαρός, v. σανκός, 112a

σκότος, 113b

σρέFω, v. ῥεω, 111b

στάς, 129

στρύμον (*Thracian*), 111b

συναχθέντων, 129

σφυρόν, 108b

ταῦρος, 109b

ταναός, 112b

τανν-, 112b

-τατος, 126

τέγος, 112b

τέρετρον, 109b

τέρχνος, 115b

τέττα, 109b

-τος, 126

τρέχω, 113a

τρύχω, 113b

ὕμων, 129

ὕπνος, 111b

φαλλός, 107b

φεν, 113b

φίλος, 116a

φόνος, 113b

φρητήρ, 109b

χαίνω, 113b

χειμών, 110b

χίων, 110b

ώλένη, 110b

ψόν, 112b

ITALIC AND ROMANCE..

Latin.

abbas, 99a
 abecedarium, 99a
 abstinentia, 99a
 accentus, 99a
 accidens, 99a
 accommodatio, 106a
 aceo, 99a
 acer, 99a
 acetum, 99a
 actualis, 99a
 acuenda esset, 99a
 acutus, 99a
 ad-, 113a
 adigit, 107a
 adjectivum, 99a
 ador, 108b
 adorare, 99a
 adoratio, 99a
 adulterium, 99a
 adversarius, 99a
 aer, 107a
 aetas, 108b
 aevum, 109a
 agnus, 109b, 111b
 ago, 107a
 alius, 109a
 ala, 113a
 alo, 113b
 altare, 99a
 altum, 99a
 amnis, 107b
 anachoreta, 99a
 ancora, 99a
 angelus, 99a, 114
 angor, 109a
 angustia, 109a
 angustus, 109a
 anima, 107a
 animal, 99a
 apostolus, 99a, 114
 appetere, 104b
 applicare, 99a
 arare, 109b
 aratrum, 99a
 archiepiscopus, 102a
 arduus, 107b
 argentum, 99a
 -arius, 124
 arma, 99b
 armilla, 99b
 ars, 99b
 articulus, 99b
 artus, 107a
 arvum, 107a
 asinus, 99b

atomum, 99b
 auctoritas, 99b
 augusti, 99a
 aura, 107a
 aurum, 99b
 avignus, *v.* agnus, 109b
 axilla, 113a
 baculum, 99b
 badius, 108a
 balbus, 99b
 baptista, 99b
 baptizo, 99b
 baptisma, 99b
 barba, 99b
 barca, 99b
 basilica, 100a
 basium, 100a
 battuere, 100a
 beatus, 100a
 benedico, 100a
 benedictio, 100a
 benedictus, 100a
 bestia, 100a
 betula, betulla, 108a
 blasphemare, 100a
 bibo, 108b
 bos, 108a
 brachium, 100a, 108a
 brassica, 100a
 brevis, 100a
 broccus, brocchus, 100a
 bulla, 100a
 buxus, 100a
 caballus, 110a
 cadere, 108a
 caecus, 113b
 calamus, 100a
 callidus, 100a
 calix, 100a
 camisia, 100a
 cancella, 100a
 cancellarius, 100a
 cancer, 100a
 candela, 100a
 candelarius, 100a
 candelabrum, 100a
 cano, 108a
 candidus, 108a
 canis, 110a
 canon, 100a
 capellanus, 100a
 caper, 114a, 123
 capere, 123
 capio, 114a
 capistrum, 100a

capitulus, 100a
 capra, 114a, 123
 captus, 100a
 caput, 100a
 carbunculus, 100a
 carcer, 100a
 caritas, 100a
 car(o)enum, car(o)enaria, 100a
 carpentum, 100b
 carus, 108a
 caseus, 100b
 castellum, 100b
 castra, 103a
 castrum (for cad-trum *v.* note 85), 108a
 castus, 100b
 castitas, 100b
 catena, 100b
 cathedra, 100b
 catholicus, 100b
 caucus, 100b
 caules, 100b
 causa, 100b
 cedere, 100a, 108a
 cedria, 100b
 cella, 100b
 celo, 114b
 census, 100b
 cera, 100b
 cervus, 108a
 cervical, 100b
 cervisia, 100b
 character, 100b
 chorda, 100b
 christianus, 100b
 chrisma, 100b
 cilicium, 100b
 circare, 100b
 circius, 100b
 circulus, 100b
 circumflexus, 100b
 civitas, 100b
 clarus, 100b
 classis, 100b
 claustrum, 100b
 clavi, 108a
 clericus, 100b
 clima, 100b
 coccus, 100b
 coloni, 100b
 columba, 100b
 columella, 100b
 columna, 100b
 *cominitiare, 101a
 commatres, 101a
 commixtio, 111b

commodum, 101a
 communio, 101a
 compar, 101a
 comparativus, 101a
 compates, 101a
 concedere, 101a
 confessio, 101a
 configere, 101a
 confortare, 101a
 consecratio, 101a
 consilium, 101a
 consimilis, 109a
 consona, 101a
 conventus, 101a
 coquina, 101a
 coquus, 101a
 cor, 109b
 cornu, 114a
 corona, 101a
 coronatus, 101a
 corpus, 108a
 corrigia, 101a
 corylus, 101a
 coryletum, 101a
 costa, 108a
 coxa *v.* costa, 108a
 craticula, 101a
 creator, 101a
 creatura, 101a
 credo, 108a
 credulus, 101a
 crepusculum, 101a
 creta, 101a
 cribrum, 101a, 108a
 crispus, 113b
 crudelis, 101a
 crux, 101a
 crystallus, 101a
 cucullus, 101a
 culcita, 101b
 cultellus, 101b
 culter, 101b
 culus, 108a
 cuprum, 101b
 curvus, 117b
 cutis, 110a
 cymbalum, 101b
 cypressus, 101b

 dacrima, *v.* lacrima, 110a
 daemon, 101b
 damnare, 101b
 damnatus, 101b
 daurus, *v.* laurus, 110a
 de, 108b
 debilis, 101b
 decedere, 101b
 decima, 101b
 defendere, 101b
 denarius, 101b

dens, 110a
 deprecatio, 101b
 descendere, 101b
 desiderabat, 101b
 despectus, 101b
 deus, 110a
 dexter, 110a
 diabolus, 101b
 diaconus, 101b
 diaconissae, *pl.*, 101b
 dictator, 101b
 dies, 110a
 dies jovis, 101b
 dies solis, 101b
 digamma, 101b
 dignus, 101b
 diluvium, 101b
 lingua, *v.* lingua, 110a,
 114b
 discere, 101b
 discipulus, 101b
 discretus, 101b
 discus, 101b
 divinator, 101b
 doctus, 101b
 dolor, 101b
 dominica, 101b
 domo, 110a
 draco, 101b
 drungus, 115a
 du, *note* 89, *p.* 120
 dubitare, 101b
 dubius, 101b
 dubitantia, 101b
 durus, 101b

 ecclesia, 101b
 edit, 110b
 eleemosyna, 101b
 elephantus, 102a
 emendare, 102a
 emineo, 108b
 -ensis, 124
 episcopus, 102a
 epistola, 102a
 equus, 110b, 122
 eremita, 102a
 esculus, 102a
 esox, 102a
 etymologia, 102a
 ex, 107b
 excommunicatus, 102a
 evangelium, 102a

 faba, 102a
 facies, 102a
 fagus, 102a
 faginus, 102a
 falco, 102a
 fallere, 102a

favere, 102a
 femininum, 102a
 fenestra, 102a
 ferre, 109b
 fibula, 102a
 ficus, 102a
 ficulus, 102a
 fides, 102a
 figura, 102a
 finis, 102a
 firmamentum, 102a
 flagellum, 102a
 flamma, 102a
 flecto, 102a
 flos, 117a
 foeniculum, 102a
 fores, 110b, 121
 forma, 102a
 fossa, 102b
 fragrare, 102b
 frater, 109b
 frenum, 102b
 fructus, 102b
 fugere, 102b
 fuga, 102b
 fulgur, 102b
 funis, 102b
 fur, 102b
 furca, 102b
 furnus, 102b
 fustis, 102b

 geminantur, 102b
 gentes, 102b
 gentilis, 102b
 gentilitatis, 102b
 genitivus, 102b
 gens, 102b
 gerundium, 102b
 gigno, 110b
 gladius, 108a
 glossa, 102b
 gradale, 102b
 gradus, 102b
 gratia (*gratias agimus*),
 102b
 gravari, 102b
 gravis, 102b
 grus, 113a

 habilis, 102b
 haeresis, 102b
 haeretici, *pl.* 102b
 hastula, 102b
 hiare, 113b
 hiems, 110b
 historia, 102b
 honor, 102b
 hora, 102b
 hospes, 102b

humilis, 102*b*
 humilitas, 102*b*
 hymnus, 102*b*
 idolum, 102*b*
 idus, 102*b*
 ignis, 119
 imago, 102*b*
 impedicare, 102*b*
 imperator, 102*b*
 imperium, 102*b*
 improbitas, 105*a*
 improbus, 105*a*
 incensum, 103*a*
 indupedio, *note* 89, *p.* 120
 induperator, *note* 89, *p.* 120
 inermis (* inermius), 124
 infamis, 103*a*
 infernum, 103*a*
 infinitivus, 103*a*
 initium, 103*a*
 insece, 112*a*
 instrumentum, 103*a*
 insula, 108*b*
 inter, 108*b*
 interjectio, 103*a*
 interrare, 103*a*
 -issimus, 126
 -isti, 128
 -istis, 128
 jejunium, 103*a*
 judex, 103*a*
 jugum, 111*a*
 jusculum, 103*a*
 justitia, 103*a*
 juvenis, 111*a*
 juvenicus, 111*a*
 kalendar, 103*a*
 labes, 108*b*
 labo, 108*b*
 labor, 108*b*
 lac, 108*b*
 lacrima, *v.* *dacrima*, 110*a*
 laicus, 103*a*
 lana, 112*b*
 lancea, 108*b*
 lapis, 108*b*
 latex, 103*a*
 latro, 103*a*
 latus, 111*a*
 laurus, *v.* *daurus*, 110*a*
 lector, 103*a*
 lectus, 103*a*
 legalitas, 103*a*
 legere, 103*a*
 legio, 103*a*
 leo, 103*a*

levis, 111*a*
 liber, 103*a*
 ligo, 103*a*
 lilium, 103*a*
 lingo, 111*a*
 lingua, *v.* *dingua*, 110*a*,
 114*b*
 linquit, 108*b*
 linum, 103*a*
 liquida, 103*a*
 littera, 103*a*
 liveo, 114*a*
 lividus, 114*a*
 livor, 114*a*
 loculus, 103*a*
 locus, 103*a*
 locusta, 103*a*
 longa, 103*a*
 longa (*navis*), 103*a*
 lorica, 103*a*
 lucerna, 103*a*
 lunaris, 103*a*
 lutum, 108*b*
 magister, 103*a*
 magnus, 121
 major, 103*a*
 maledicis, 103*a*
 maledictio, 103*a*
 maledictus, 103*a*
 malitia, 103*a*
 malva, 103*a*
 mancus, 103*b*
 manere, 103*b*
 manna, 103*b*
 mantellum, 103*b*
 manus, 103*b*
 mare, 111*b*
 margaritae, 103*b*
 martulus (*martellus*), 103*b*
 martyrium, 103*b*
 masculinum, 103*b*
 mater, 111*a*
 matutinus, 108*b*
 medicus, 103*b*
 medicina, 103*b*
 meditor, 108*b*
 medius, medium, 111*a*
 mel, 108*b*
 membra, 103*b*
 memini, 111*a*
 memoria, 103*b*, 111*a*
 mendicus, 103*b*
 mensa, 103*b*
 mensis, 111*b*
 mensura, 103*b*
 meretrix, 103*b*
 metrum, 103*b*
 mille, 103*b*
 millefolium, 133*b*

miles, 103*b*
 militia, 103*b*
 ministrare, 103*b*
 minus (*minus facere*), 103*b*
 mirabile, 103*b*
 miraculum, 103*b*
 mirus, 103*b*
 misceo, 111*b*
 modus, 103*b*
 molina, 103*b*
 molo, 111*a*
 monachus, 103*b*
 monasterium, 103*b*
 mons, 108*b*
 moralis, 103*b*
 mori, 111*a*
 morticinium, 103*b*
 mortuus, 111*a*
 morus, 103*b*
 mulus, 103*b*
 mulxi, 111*a*
 murus, 103*b*
 muta, 103*b*
 myrias, 103*b*
 myrtus, 103*b*
 nascor (*gnascor*), 110*b*
 natalicia, 103*b*
 nates, 104*a*
 natio, 104*a*
 natrix, 114*a*
 navis, 103*a*, 108*b*
 nebula, 111*b*
 negotium, 104*a*
 nepos, 114*a*
 neptis, 114*a*
 nere, 108*b*
 nerio, Nero, 108*b*
 neutrum, 104*a*
 nidus, 114*a*
 *nigvis, nihvis, *v.* *nix*, 116*b*
 nimbus, 104*a*
 nix, nivis, 116*b*
 nosco (*gnosco*), 110*b*
 nota, 104*a*
 notarius, 104*a*
 novellus, 104*a*
 novus, 111*b*
 nox, 111*b*
 nudus, 116*a*
 numerus, 104*a*
 nuptiae, 104*a*
 nux (*enux*), 110*a*
 obediens, 104*a*
 oblatio, 104*a*
 oculo, 114*b*
 octo, 122
 oenos, O. L., 111*b*
 offerre, 104*a*

olea, 104a
 olor, 107a
 operarius, 104a
 optativus, 104a
 opus, 104a
 oraculum, 104a
 orate, 104a
 oratio, 104a
 ordinare, 104a
 ordinatio, 104a
 ordino, 104a
 ordo, 104a
 ostiarius, 104a
 ostreum, 104a
 ovum, 112b

 paganus, 104a
 pagus, 104a
 pallium, 104a, 114b
 palma, 104a, 111b
 palus, 104a
 panis, 104a
 papa, 104a
 papilio, 104a
 papyrus, 101a
 paradisi, 104a
 parare, 104a
 paries, 104a
 parochia, 104a
 pars, 104a
 pascha, 104a
 passio, 104b
 patella, 104b
 pater, 109b
 paucus, 118b
 pauper, 104b
 pausa, 104b
 pavo, 104b
 pax, 104b
 peccatum, 104b
 pedester, 104b
 pelliceus, 104b
 pensus, 104b
 pentecoste, 104b
 penultima, 104b
 peregrinus, 104b
 perfectus, 104b
 pergaminum, 104b
 persona, 104b
 petere, 104b
 phiala, 104b
 philosophus, 104b
 philosophia, 104b
 pinaculum, 104b
 pitus, 104b
 piper, 104b
 pirus, 104b
 piscis, 104b, 114a
 piscator, 104b
 pistior, 101a

pistrinum, 101a
 plaga, 104b
 plangere, 104b
 plenus, 104b, 111a
 plebs, 104b
 plicare, 104b
 pluma, 104b
 poena, 104b
 poenitere, 104b
 poenitentia, 104b
 pondo, 105a
 pons, 105a
 populus, 105a
 porcellus, 105a
 porcus, 105a
 porta, portus, 105a
 portare, 105a
 positivus, 105a
 postilena, 105a
 postis, 105a
 praebendarius, 105a
 praeceptum, 105a
 praedico, 105a
 praelatus, 105a
 praeservare, 105a
 praestare, 105a
 prandium, 105a
 presbyter, 105a
 pretiare, 105a
 primus, 105a
 princeps, 105a
 prior, 105a
 probabatur, 105a
 probatus, 105a
 probus, 105a
 prologus, 105a
 pronomen, 105a
 propositus, 105a
 propheta, 105a
 proprius, 116a
 prudens, 105a
 psalmus, 105a
 psalterium, 105a
 purgatorium, 105a
 purpura, 105a
 purus, 105a
 puteus, 105a

 quadragesima, 105a
 quaerere, 108b
 quaestio, 105a
 quinquagesima, 105a
 quiritare, 102b

 rastrum, 105a
 rectus, 114b
 reddere, 105b
 regnare, 105b
 regula, 105b
 reliquiae, 105b

remus, 105b
 rete, 105b
 rex, 105b, 114a
 rigo, 117a
 rogavi, 122
 rosa, 105b
 rosetum, 105b
 rota, 111b
 ruber, 111b
 ruta, 105b

 sabbatum, 105b
 saccus, 105b
 sacerdos, 105b
 sacrificium, 105b
 sacrilegium, 105b
 saeculum, 105b
 sagitta, 108b
 sagum, 109a
 sal, 111b
 salicestrum, 105b
 salio, 109a
 saliva, 105b
 salix, 109a
 saltus, 105b
 salutare, 105b
 salvare, 105b
 sanctus, 105b
 scabellum, 105b
 scala, 105b
 scandere, 105b
 schola, 105b
 scholasticus, 105b
 sciens, 105b
 scribere, 105b
 serinium, 105b
 seripulus, 105b
 scutella, 105b
 scutum, 109a
 sēbum, 105b
 securus, 105b
 secus, 109a
 sedeo, 112a
 senator, 105b
 senex, 112a, 124
 senior, 105b
 sensus, 105b
 sepelire, 105b
 sepultura, 105b
 septimana, 105b
 septuaginta, 106a
 sequor, 112a
 sermonarius, 106a
 serpens, 109a
 serus, 106a
 sextarius, 106a
 siccus, 111b
 signum, 106a
 similis, 109a
 situla, 106a

socer, 111*b*
 socrus, 111*b*
 sôl, 112*a*
 solarium, 106*a*
 solitarius, 106*a*
 somniari, 106*a*
 somnus, 111*b*
 sophista, 106*a*
 soror, 112*a*
 sors, 106*a*
 -sos, 127
 spatium, 106*a*
 sperare, 106*a*
 spina, 106*a*
 spiraculum, 106*a*
 spiritus, 106*a*
 spoliare, 106*a*
 spongia, 106*a*
 sponsa, 106*a*
 stabulum, 106*a*
 stagnum, 106*a*
 stannum, 106*a*
 status, 106*a*
 stimulus, 106*a*
 stlocus (O. L.), 103*a*
 stola, 106*a*
 stragulum, 106*a*
 strata, 106*a*
 strigilis, 106*a*
 -sum, 127
 superlativus, 106*a*
 sus, 118*a*
 syllaba, 106*a*
 synodus, 106*a*

tabellarius, 106*a*
 taberna, 106*a*
 tabes, 106*a*
 tacere, 114*b*
 talentum, 106*a*
 tardare, 106*a*
 -tas, 124
 taurus, 109*b*
 tellus, 106*a*
 temere, 112*b*
 tempero, 106*b*
 templum, 106*b*
 temptare, 106*b*
 tendere, 106*b*
 tenebrae, 112*b*
 tenuis, 112*b*
 terebra, 109*b*
 terminus, 106*b*
 terra, 109*b*
 tertia, 106*b*
 testis, 106*b*
 testimonium, 106*b*
 theca, 106*b*
 theoria, 106*b*
 thesis, 106*b*

thronus, 106*b*
 thus, 106*b*
 Titan, 106*b*
 titulus, 106*b*
 torques, 106*b*
 torrens, 111*b*
 torta, 106*b*
 totus, 106*b*
 tractus, 106*b*
 traditio, 106*b*
 trans, 109*b*
 tribunus, 106*b*
 triinitas, 106*b*
 tripus, 106*b*
 tristis, 106*b*
 tructa, 106*b*
 truncus, 106*b*, 115*b*
 trux, 114*b*
 tuba, 106*b*
 tugurium, 112*b*
 tunica, 106*b*
 turba, 106*b*
 turris, 106*b*
 tympanum, 106*b*

ulna, 110*b*
 ultima, 106*b*
 uncia, 106*b*
 ûnctare, 106*b*
 unguere, 106*b*
 unicornis, 106*b*
 unus, 111*b*
 ursus, 106*b*

vacca, 118*a*
 vagina, 106*b*
 vates, 109*b*
 velum, 106*b*
 venenum, 106*b*
 ventus, 114*b*
 vermis, 110*a*
 versatile, 106*b*
 veru, 107*b*
 versus, 106*b*
 verus, 106*b*
 vesper, 112*b*
 vetus, 107*a*
 vicus, 112*b*
 vidua, 107*a*, 112*b*
 vigil, 107*a*
 villani, 107*a*
 vinea, 107*a*
 vinum, 107*a*
 viperae, 107*b*
 vir, 112*b*
 viridis, 109*b*
 virus, 108*b*
 virtus, 107*b*
 visio, 107*b*
 vita, 109*b*

vitium, 107*b*
 vivus, 109*b*
 vocula, 107*b*

Medieval Latin.

baro, 100*a*
 brace, 100*a*
 caldaria, 100*a*
 cattus, 100*b*
 clocca, 100*b*
 cloccarium, 100*b*
 companionum, 101*a*
 conucula, 101*a*

folis, 102*a*
 fontana, 102*a*
 foresta, 102*a*
 forestis, 102*a*

gridare, 102*b*

hanapus, 102*b*

melinus, 119*b*
 mirare, 103*b*
 multo, 103*b*

padulis, 104*a*

sappetus, 105*b*
 sicera, 106*a*
 solta, 106*a*
 stratura, 106*a*

torneamentum, 106*b*

Piccanian.

Auximum, 118*a*

Sabine.

ausum, 99*b*
 nerio, 108*b*

Oscan

ner, 108*b*
 nesimo, 114*a*
 teerûm, 109*b*
 túvtú, 112*b*

Umbrian.

berus, 107*b*
 berva, 107*b*
 esme, 125
 esmei, 125
 nesimo, 114*a*

ner, 108*b*
pir, 119
pusme, 125
toto, 112*b*
trâf, 109*b*

Romance.

-êsis, 124
finisco, 102*a*
-issa, 124
pêso, 104*b*
putana, 105*a*
rendere, 105*b*
standardo, 106*a*

Italian.

landa, 118*a*
veltro, 107, 118*a*

Provençal.

landa, 118*a*

French.

bai, 108*a*
blâmer, 100*a*
broche, 100*a*

charité, 100*a*
chérir, 108*a*
commencer 101*a*

empêcher, 102*b*
eucens, 103*a*
estaminet, 106*a*
estonner, étonner, 102*a*

foudre, 102*b*

haster, hâter, 102*b*

lande, 118*a*

merveille, 103*b*
mesfaire, méfaire, 103*b*
moi, 126

pan, 123
parfait, 104*b*
paroi, 104*a*
pavillon, 104*a*
petit, 104*b*
pommaille, 105*a*
prison, 105*a*

rame, 105*b*
recommandare, 105*b*

sauver, 105*b*
sou, 106*a*
songer, 106*a*
sorte, 106*a*
soutenir, 106*a*

talent, 106*a*
tonneau, 106*b*
trahison, 106*b*
tribunal, 106*b*

vice, 107*b*

TEUTONIC.**Gothic.**

ada (*Kr. Goth.*) note 88,
page 112
* *ADDIA* (*Prim.*), note
88, page 112
afvairpands, 129
aggilus, 114
ains, 111*b*
aivs, 109*a*
alan, 113*b*
aleina, 110*b*
alis, 109*a*
alja-, 109*a*
aljai, 113*b*
alls, 118*b*
anabiudan, 117*a*
and-, 123
andbindandans, 129
anhafjands, 129
apaustaulus, 114
ara, 115*b*
arbi, 116*b*
arbja, 116*b*
-areis, 124
at-, 113*a*
aulisans, 118*a*
auluma, 118*a*
auhumiists, 118*a*
aupeis, 118*b*

balgs, 117*a*

banja, 113*b*
baurd, 117*a*
baurgs, 113*b*, 117*a*
braids, 111*a*
brôpar, 109*b*

dailjan, 115*a*
dails, 115*a*
daur, 110*b*, 121
daurô, 110*b*
driugan, 115*b*
du, 115*b*

eisarn, 118*a*

fadar, 109*b*
faurbiudan, 117*a*
fimf, 122
fisks, 114*a*
fôtubaurd, 117*a*
fram, 126
fruma, 126
fulan, 129
fulls (*i.e.* fulns), 111*a*
fulljan, 111*a*

ga-, 130
gaarbja, 116*b*
gabundanana, 129
gadrauhits, 115*b*
gagaggandam, 129
gahaussjands, 129
gustandands, 129

gataujudan, 129
gazds, 117*b*
gild, 117*b*
graban, 115*a*

hafja, 114*a*
haihs, 113*b*
hairto, 109*b*
hauru, 114*a*
hilpan, 123
huljan, 114*b*
hunds, 110*a*, 123

iddja, 128
idreiga, 116*a*
is, 126
ita, 126
-iza, 126
îzvis, 129

jains, 127
juggs, 111*a*
juhiza, 111*a*
juk, 111*a*

kan, 110*b*
kuni, 110*b*

laigô, 111*a*
lamb, 118*a*
land, 118*a*
leihts, 111*a*

mag, 115*b*
manags, 116*a*
managei, 116*a*
man, 111*a*
mêna, 111*b*
mênôþs, 111*b*
mêš, 103*b*
mikils, 121
missa, 118*a*

nadr, 114*a*
namô, 109*a*
naqvaps, 116*a*
nêhv, 114*a*

ôg, 116*a*
ôgan, 116*a*
-oza, 126

qvêns, 109*b*
qvinô, 109*b*
qvius, 109*b*

raihhs, 114*b*
reiks, 114*a*
rign, 117*a*
runa, 118*b*

saian, 116*b*
salt, 111*b*
salta, 109*a*
sakan, 112*a*
samaþ, 129
sauil, 112*a*
si, 126
sidus, 113*b*
sineigs, 112*a*
sinista, 112*a*
sinþs, 118*b*
sitan, 112*a*
skadus, 113*b*
skalks, 118*b*
* snaigas, * snaigvas *v.*
snaivs, 116*b*
snaivs, 116*b*
sokjan, 112*a*
stiur, 109*b*
sunna, 118*b*
sunnô, 118*b*
sunus, 121
svailhra, 111*b*
svailhrô, 111*b*
svistar, 108*a*, 112*a*

tagr, 110*a*
taihsvs, 110*a*
tamjan, 110*a*
timan, 110*a*
triu, 110*a*
tuggô, 114*b*, 123

tunþus, 110*a*
þahan, 114*b*
þairh, 118*b*
þaurus, 115*b*
þiuda, 112*b*
þragja, 113*a*
ushlaupands, 129
usstandands, 129

vair, 112*b*
vairþs, 116*b*
vait, 123
valdan, 116*b*
vaurus, 110*a*
veihs, vêhs, 112*b*
viduvô, 112*b*
vilþeis, 119*b*
vinds, 114*b*
vulfs, 121
vulla, 112*b*

Old Teutonic.

* hafar, 123
hafjan, 123

Old High German.

ahsala, 113*a*
ali-, 109*a*
angi, 109*a*
angil, *v.* engil, 114
aphul, aphol, 115*a*
bâga, 117*a*
bâgan, *v.* biag, 117*a*
bâgên, 117*a*
bana, *f.*, 113*b*
bano, *m.*, 113*b*
banôn, 113*b*
bart, 99*b*
biag, *v.* bâgan, 117*a*
bigil, *v.* bihal, pigil, 117*a*
bihal, *v.* pihal, 117*a*
bimunigôn, 124
biseh, 111*b*
bisihan, 111*b*
blat, *v.* plat, 111*a*
bluot, 117*a*
boch, *v.* poch, 117*a*
bogo, *v.* poco, 117*a*
bort, 117*a*
borti, 117*a*
borto, 117*a*

charra, *v.* karra, garra,
117*b*
chona, 109*b*

chraft, 117*b*
chranuh, 113*a*
chrump, 117*b*
chruzigôn, 124
chuo, 109*b*
chus, 117*b*

dach, 112*b*
demar, 112*b*
dunni, 112*b*

ecala, 117*b*
egala, 117*b*
ei, 112*b*, *note* 88, *p.* 112
elithiotic, 109*a*
engil, *v.* angil, 114
êwa, 109*a*

fiur, 119
folma, 111*b*
friudil, fridil, 116*a*

gabala, 117*b*
galingan, 113*a*
ganzo, 115*b*
garra, *v.* karra, 117*b*
gart, 117*b*
gartja, 117*b*
gêr, 117*b*
ginên, 113*b*
ginôn, *v.* ginên, 113*b*
gisal, 117*b*
giwiznes (*neut.*), 119*a*
giwiznesi (*fem.*), 118*b*
glas, 117*b*
grioz, 117*b*

hadu, 117*b*
helan, 114*b*
heli, 114*b*
hiruz, 108*a*
hnot, 110*a*
hosa, 117*b*
hulla, 114*b*
hut, 110*a*
hutta, 110*a*

îsarn, 118*a*
îwa, 118*a*

karra, *v.* garra, chirra, 117*b*
kramph, 117*b*
kruog, 115*a*
krûs, 113*b*

ledar, 118*a*
luogên, 118*a*
lûs, 118*a*

mana (manha), 111
marach, 118*a*

merilha, *f. v.* marach, 118*b*
 mias, 103*b*
 miscjan, 111*b*
 muotar, 111*a*

nachat, 116*a*
 natra, natara, 114*a*
 nefo, 114*a*
 nest, 114*a*
 nibul, 111*b*
 nift, 114*a*
 niftila, 114*a*

palc, 117*a*
 phant, 123
 pigil, *v.* bigil, 117*a*
 pihal, *v.* bihal, 117*a*
 plat, *v.* blat, 111*a*
 plî, 114*a*
 pliwes, 114*a*
 poch, *v.* boch, 117*a*
 poco, *v.* bogo, 117*a*
 postul, 114

rad, 111*b*
 reht, 114*b*
 richi, 114*a*
 rûn, 118*b*

sagên, 112*a*
 sech, 118*b*
 segal, 118*b*
 sia, 127
 sie, 127
 sind, 118*b*
 siniscalc, 112*a*
 sio, 127
 siu, 127
 snecco, 118*b*
 snuor, 118*b*
 stroum, 111*b*
 sumar, 118*b*
 sumna, 118*b*
 sunna, 118*b*

tarch, 117*b*
 tiligôn, 124
 triugan, 114*b*
 truhtin, 115*b*
 truhtinc, 115*b*

wagan, 118*b*
 wër, 112*b*
 wëralt, 112*b*
 witu, 119*a*
 wolchan, 119*b*
 wolf, 121

za, zi, zuo, 115*b*
 zand, zan, 110*a*

zi, *v.* za, 115*b*
 zoraht, *v.* zhort, 113*a*
 zorht, 113*a*
 zorft, *v.* zohrt, 113*a*
 zûn, 117*b*
 zuo, *v.* za, 115*b*

Middle High German.

bil, 117*a*
 bluot, *pl.* blüete, 117*a*
 hader, 117*b*
 limpfen, 118*a*
 man, 118*a*
 march (marc), 118*a*
 vluor, 118*a*
 vriedel, 116*a*

New High German.

aufgebot, 117*a*
 ausgesprochen, 130
 bemächtige, 124
 blappen, blappern, *v.* plap-
 pern, 118*b*

enge, 109*a*
 enterben, 117*a*

geführtin, 118*b*
 genter, 115*b*
 gerte, 117*b*

hader, 117*b*
 haksch, 118*a*
 hülle, 114*b*

jemand, 123

kind, 110*b*
 krug, 115*a*

lahm, 118*a*
 lügen, 118*a*

machtig, 124
 maulthier, 100*a*
 menge, 116*a*
 mis-, 118*a*
 mucke, 118*a*
 muschel, 114

öde, 118*b*

peinige, 124
 plappern, *v.* blappern, 118*b*

reinige, 124

walten, 116*b*

werth, 116*a*
 windbeutel, 102*a*

zahlen, 115

Old Saxon.

ehu, 110*b*
 reht, 114*b*
 tûn, 117*b*
 vidu, 119*a*
 wolcan, 119*b*

Frisian.

appel, 115*a*

Low German.

kaute, kute, 105*a*

Middle Dutch.

slecke, 118*b*

Anglo-Saxon.

ägg, *note* 88, *p.* 112
 äppel, 115*a*

bât, 117*a*
 boga, 117*a*
 bucca, 117*a*

coss, 117*b*
 craft, 117*b*
 crumb, 117*b*

dëore, 117*b*

ëorl, 115

flôr, 118*a*
 folma, 111*b*

• gandra, 115*b*
 gâr, 117*b*
 gevitnesse, 119*a*
 gevitnes, 119*a*
 gläs, 117*b*
 grëot, 117*b*

häfer, 114*a*
 heaðo, 117*b*
 hos, 117*b*
 hosa, 117*b*

iv, 118*a*

lûðer, 118*a*

lôcian, 118*a*
lûs, 118*a*

nest, 114*a*
nefa, 114*a*
nift, 114*a*

sêgel, 118*b*
snegel, 118*b*
sumor, sumer, 118*b*
sunna, 118*b*

to, 115*b*
tûn, 117*b*

vâgen, 118*b*
volcen, 119*b*
vudu, 119*a*

English.

dark, 117*b*

flat, *note* 87, *p.* 111
floor, 118*a*

hat, 114
herring, 114
hog, 118*a*

lame, 118*a*

nut, 110*a*

reader, 114

smoke, 115
strike, 115
string, 114

strive, 115
swain, 115

town, 117*b*
witness, 119*a*

Old Norse.

ala, 113*b*

baegjask, 117*a*
baga, 117*a*
bâgi, 117*a*
bâgr, 117*a*
bana, 113*b*
bani, 113*b*
bâtr, 117*a*
belgr, 117*a*
bogi, 117*a*
bokki, 117*a*
borð, 117*a*

coss (koss), 117*b*

döckr, 117*b*
drótt, *pl.* dróttir, 115*b*
dróttin, 115*b*
dróttning, 115*b*

egg, *note* 88, *p.* 112
epli, 115*a*

flatr, *note* 87, *p.* 111

glas, 117*b*
griot, 117*b*

hafr, 114*a*
heill, *note* 84, *p.* 108

iarl, 115
iarn, *v.* isarn, 118*a*
iôr, 110*b*
isarn, 118*a*

kerra, 117*b*
kreftr, 117*b*

ledr, 118*a*
lûs, 118*a*

naktr (nakinn), 116*a*
nift, 114*a*

segl, 118*b*
snigil, 118*b*
snara, 118*b*
son (sonr), 121
sumar, 118*b*
sunna, 118*b*
svefn, 111*b*
svein, 115

tívar, 110*b*
tönn, 110*a*
tûn, 117*b*

þak, 112*b*
þior, 109*b*

vagn, 118*b*
viðr, 118*a*

ÿr, 118*a*

WINDIC OR LITO-SLAVONIAN.

A. Slavonic.

Old Slavonic.

ablanĭ, ablonĭ, *v.* jablanĭ,
115*a*

agne, *v.* jagne, 111*b*
agnĭca, *Ch. Sl.*, 111*b*
agnĭci, *v.* jagnĭci, 111*b*
aice, *v.* jaice, 112*b*
anĭgelŭ, *Ch. Sl.*, 114
apostolŭ, *Ch. Sl.*, 114
-ari, 124
azŭ, 109*a*
aza, 109*a*

baĭda, 128
braĭa, 99*b*
bratrŭ, 109*b*

bratŭ, 109*b*

czrĭvĭ, 110*a*
czrŭmĭnŭ, 110*a*
czrŭvĭ, 110*a*

dĕliti, 115*a*
denĭ, *v.* dĭnĭ, 121
desĭnŭ, 110*a*
dĭnĭ, 110*a*, 121
do-, 115*b*
drĕvo, 110*a*
drugŭ, 115*b*
drŭva, 110*a*
dvĭrĭ, *pl.* 110*b*

* geravjas, *v.* žeravĭ, 113*a*

gnĕzdo, 114*a*
golŭbĭ, 100*b*
goveĭo, 109*b*
grebŭ, 115*a*
grobŭ, 115*a*

ida, 128
igo (jĭgo), 111*a*
ime, 109*a*

jablanĭ, 115*a*
jablŭko, jabluka, 115*a*
jadg, 128
jagne, *v.* agne, 111*b*
jagnĭci, *v.* agnĭci, 111*b*
jaice, *v.* aice, 112*b*
jaĭza, 109*a*

jeza, 109a
junū, 111a

karati, 119aa
kobyła, 110a
kobylica, 110a
kolěno, 119b
konī, 110a
krivū, 117b
krūczagū, 115a
krūczimīnica, 115a
krūczivīnikū, 115a

līgūkū, 111a
lizq, 111a

mogq, 115b, 123
mati, 111a
mēsēcī, 111b
mēsiti, 111b
mnogū, 116a

nagū, 116a
nebo, 119a

ognī, 119
onū, 127
orilū, 115b

pametī, 111a
plūnū, 111a
prijateli, 116a

sladūkū, *note* 82, *p.* 97, 124
sejati, 116b
sēsti, 112a
sestra, 112a
sladūkū, *note* 82, *p.* 97, 124
slūnice. 112a
snēgū, 116b
snocha *v.* snūcha, 121
snūcha, 121
sobaka, 110a
solī, 111b
srūdīce, 109b
struja, 111b
struga, *v.* struja, 111b
suchū, *Ch. Sl.*, 112a
suka, 110a
sūnū, 111b
svekrū, 111b
svekrūvī, 111b
svekry, *v.* svekrū, 111b

tīma, 112b
tīnīkū, 112b
trūnū, 115b
turū, 109b

vazū, 109a
veczerū, 112b
vīdova, 112b
vīšī, 112b
vīdāq, 116b
vīditi, 116b
vīlasti, 116b
vlūkū, 120
vlūna, 112b
vranū, 119a

žena, 109b
žentī, 110b
žeravī, 113a
žima, 110b
živū, 109b
žnajq, 110b

Polish.

jaje, 112b

wart, 116b
wilk, 120

Servian.

junak, 111a

B. Lettic.

Lithnanian.

àngēlas, 114
ànsztaš, 109a
anksztā, 109a
ans, 127
apàsztalas, 114
aszarā, 110a
àszva, 110b
at-, 113a
àuksas, 99b

barzdā, 99b
brōlis, 109b

da-, 115b
dalis, 115a
dalýti, 115a
dantis, 110a
deni, 121;
dēnā, 110a
derva, 110a
deszinē, 110a
dēvas, 110a
dīnī
draúgalas, 115b
draúgas, 115b
dūrys, 110b

erélis, 115b
eris, 115b
-ésnis, 126
galé ti, 119a
galiū, 119a
gàndras, 115b
gēlbēti, 123
gervē, 113a
gianti, 110b
grabas, 115a
gývas, 109b

ìnkaras, 99a

jáunas, 111a
-jaús, 126
-jáusei, 126
-jáusias, 126
jungas, 111a

kāmpas, 110a
karczamā, 115a
kelýs, 119b
kirmēlē, 110a
kirmīnas, 110a
kirmis, 110a, 119a
koravóti, 119a

kreivas, 117b
kuinas, 110a
kulnis, 119b
kumėlē, 110a
kumelūkas, 110a
kūmpas, 110a

laižau, 111a
lengvas, 111a

maiszyti, 111b
mėlynas, 119b
mėnes, *v.* mėnū, 111b
mėnū, 111b
mergā, 119b
mergėlē, 119b
mokėti, 116a
moku, 116a, 123
motė, 111a

nugas, 116a

obelis, 115a
óbūlas, 115a
-orius, 124

pilnas, 111a
pirm, 126
pirmas, 126

plātūs, 111a
prētēlius, 116a

rátas, 111b

sakaú, 112a
saldūs, *note* 82, *p.* 97
sápnas, 111b
sáulē, 112a
saúisas, 112a
sēklā, 116b
sekū, 112a
sémens, 116b
sénas, 112a
sēnis, 112a
sesti, 112a
sesú, 112a
s' ti, 116b
snégas, 116b
snocha, 121
snūcha, 121
sraúmē, 111b
stógas, 112b
szu, 110a

szirdis, 109b

tamsà, 112b
tauta, 112b

ugnis, 119

vákaras, 112b
valdaú, 116b
valdýti, 116b
várna, 119a
várnas, 119a
vénas, 111b
vērtas, 116b
vēse'ti, 112b
vész-pats, 112b
vilkas, 120
vilna, 112b
výras, 112b

žemà, 110b
žinau, 110b

Lettish.

ābols, 115a
dallit, 115a
debbes, 119a
d'ws, 110a
draudse (* draugia), 115b
ērglis, 115b
gōws, 109b
krōgs, 115a
sapnis, 111b
tauta, 112b
waldit, 116b
wēns, 111b
wirs, 112b

Old Prussian.

ains, 111b
dellieis, 115a
emnes, 109a
* ganna, 109b
tauta, 112b
werts, 116b
widdewū, 112b

CELTIC.

Old Celtic.

ad-, 113a
ande-, 99a, 123 (St. 734)
Argento-ratum, 99b (St. 607)
Arduenna, 107b
ate, *note* 103, *p.* 113
bulga, 117a (St. 217)
Camba, 110a
Cambodunum, 110a. (St. *p.* 150)
carrus, 117b
cataracton, *note* 85, *p.* 108
* catarax, *note* 85, *p.* 108
Caturiges, 117b
Catu-slōgi, 117b (St. 1003)
Cebenna, 107b
covinus, (*Brit., Belg.*)
118b
Crixus, 113b
dan (*root*), 122
drungus, 115a
dula, 122 (*see* *πεμπέ-
δουλα*; St. 765)
Gaesati, 117b (St., Gai-
sati, 216)
gaesum, 117b

Κάρονον τὴν σάλπιγγα,
113b
Κάρωνξ, 114a

λαγκία, 108b
Lutetia, Luteva, 108b

μαρκαν, *acc.*, 118a
Μορικάμβη, 110a

νεμητον, *acc.*, 121 (St. 423)

οὔξελλον, οὔξελλα (*Brit.*),
118a (*v.* St. 13)
Oppianicnos, 123

πεμπέδουλα, *see* dula, 122
(St. 765)

Σεγομαρος, 121 (St. 423,
p. 156)
Seno-magus, 112a

tarvos, 109b (St. *p.* 159)
Toutissicnos, 123

Uxellodunum, 118a (St. 13)

vertragus, 107, 113a (St. 74)

vidu, 119a (St. 46)

Old Irish.

ab, 99a (*C. l. w.*)
aball, 115a (St. 555)
abstanit, 99a
accidit, *v.* aiccidit, 99a
accus, *v.* ocus, 109a
achtail, 99a (*C. l. w.*)
áctegim, 99a
acuit, 99a
accus, *v.* ocus, ocuis, 109a
achtail, 99a (*C. l. w.*)
áctegim, 99a
acuit, 99a
acus, *v.* ocus, ocuis, 109a
ad-, 113a, 120
adaltas, 99a (St. 882)
adgénsa, 110b
adgeuín, 110b
adiect, adiecht, 99a
admuinur, 111a
adrad, 99a (*C. l. w.*)
adras, 99a
adrorsat, 99a
adsaitis, 112a
aellis, *dat. abl.*; *v. gen.*,
ecolso, ecilse; 101b
aér, *v.* áiar, 107a
ag (*root*), 107a
agathar, 116a

- áiar, *v. aéir*, 117a
 -aib, *v. -ib*, 127
 aibgiter, 99a (*C. l. w.*)
 aiccent, aiccend, *dat. aic-*
 ciund, 99a
 aiccidit, *v. accidit*, 99a
 aicher, 99a (*C. l. w.*)
 aichthi, 116a
 aidrech, 116a
 ailè, 109a, 113 (*St. 158*)
 ailigin, 107a
 aine, 103a (*C. l. w.*)
 aingel (angel), 99a, 114
 (*C. l. w.*)
 ainm, 107a, 109a (*St.*
 991)
 airdirec, *v. erdire, irdirrec*,
 113a
 -aire, *v. -ire*, 124
 airecal, 104a
 airget, *v. argat*, 99a
 airlech, 103a
 airri, 127
 áis (óis), *gen. áisa, aisso*
 (óissa, óesa), 109a (*St.*
 735, 812)
 aith (*ati-), 113a (*St. 155*)
 aithgne, 110b
 aithirge, *v. ithirge*, 116a
 al, (root) 113a
 almsan, *acc. almsin*, 101b
 (*C. l. w.*)
 alt, 107a
 altóir, 99a
 altram, 113a
 -am, 126
 amail, amal, 109a
 anilabar, 118b, 124 (*St.*
 1133)
 anprom, amprome, 105a
 ana, 127
 ancretem, 124
 ancretmech, 124
 angel (aingel), 99a, 114
 anim, 107a, 109
 apstal, 99a, 114 (*C. l. w.*)
 apstallacht, 124
 ar (root), 109b
 arafulsam, 113a
 arathar, 99a
 arbac, *v. orpe*, 116b (*St.*
 752, *p. 163*)
 ardd, 107b
 arenindarbe, 117a (*St.*
 752)
 argat, *v. airget*, 99a
 arm, arma, *v. dat. ísind-*
 airm, 99b
 arnachlitrindarpither,
 117a, 130
 art, 99b (*C. l. w.*)
 articol, *gen. sing., nom.*
 pl., articuil, dat. ar-
 tucol, 99b
 arva (arba), 107a
 as (a, es), 107b
 asan, 99b
 asdul, 102b (astol, *C. l. w.*)
 asil, 113a
 asmeenugur, 124
 asrobrad, 130
 atbela, 113b
 athir, 109b, 113 (*St. 13,*
 1046)
 athusu, 126
 atom, 99b
 atomaig, 107a
 -atu, *v. -etu*, 124
 augtortás, 99b (*St. 1107*)
 augaist, 99b (*C. l. w.*)
 bachall, 99b (*C. l. w.*)
 bádlud, 117a
 бага, 117a
 bagim, 117a
 bágul, 117a
 baislic, 100a (*C. l. w.*)
 baitsim, *acc. baithis, dat.*
 bathius, 99b
 bal (root), 113b
 balb, 99b (*C. l. w.*)
 ball, 107b (*St. 638*)
 ban, *v. ben (root)*, 113a
 ban (mulier), *v. ben*, 109b
 (*St. 21*)
 handechuin (*pl.*), 101b
 banscala, 118b
 bar, *v. ber (root)*, 109b
 bare, 99b (*C. l. w.*)
 bás, 113b
 bathach, 113b (*St. p.*
 163)
 baupstaist, 99b (*C. l. w.*)
 béisti, *f. pl.*, 100a (*C. l. w.*)
 bémen (*pl.*), 113b
 ben, *v. ban (root)*, 113a
 ben (mulier), *v. ban*, 109b
 bendachae, 100a
 bendacht, 100a (*C. l. w.*)
 béo, *v. biu*, 109b
 beod, 109b
 beogidir, 109b
 beothu, bethu, 109b
 ber, *v. bar (root)*, 109b
 berach, 107b
 bethe, 108a
 bethu, beothu, 109b
 biad, 109b (*St. 477*)
 biáil, biail, buáil, 117a
 birdae, 107b
 biu, *v. béo*, 109b
 búu, 127
 bóchaill, 108a (*St. 583*)
 boide, *v. buide*, 117a
 bolg, bole, 117a (*St. 217*)
 boll, 100a (*St. 159; C. l.*
 w.)
 borg (borec), 113b, 117a
 borggde, *v. borg*, 113b
 bou, 108a, 109b
 brace, 100a (*C. l. w.*)
 braich, 100a (*C. l. w.*)
 braisech, 100a
 bran, 119a
 bráth, 122 (*St. 336*)
 breth, 122 (*St. 336*)
 bráthair, bráthir, 109b (*St.*
 1047)
 breib, 100b
 brithemnacht, 124 (*St.*
 336)
 bróen, 117a
 búaid, 117a
 buáil, *v. biáil, biail*, 117a
 buide, *v. boide, adj.* 108a,
 (*St. 803*), *subst.* 117a
 buidech, 117a
 buidnib, 117a
 caech, 113b
 cacht, 100a (*C. l. w.*)
 cailech, 100a
 caille, 104a, 114b (*C. l.*
 w.)
 caimse, 100a (caimmse, *C.*
 l. w.)
 caindlóir, 100a (*St. 44*)
 caingel, 100a
 caiptel, 100a (*C. l. w.*)
 caire, 119a
 cairigud, 119a
 caise, 104a (*C. l. w.*)
 cáise, 100b (*C. l. w.*)
 caisel, 100b (*C. l. w.*)
 calann, 103a (*C. l. w.*)
 cailid, 100a (*C. l. w.*)
 canm, 109b
 canmaib, *dat. pl., v.*
 camn, 109b
 cammdere, 109b
 camthuisil, 109b
 can (root), 108a
 canóin (*acc.*), 100a (*C. l.*
 w.)
 car (root), 108a
 carachtar, 100b
 carcar, *gen. pl. carere*,
 dat. carcáir, 100a
 carim, cairim, 128
 carmocol, 100a

carpat, 100*b* (*C. l. w.*)
 cast, 100*b*
 castoit, 100*b* (*C. l. w.*)
 cath, 117*b*
 cathir, cathair, 108*a* (St. 13)
 cathlac, 100*b* (*C. l. w.*)
 cathrach, *gen. v. cathir*,
note 85, p. 108
 caut, 100*a*
 cedir, 100*b*
 c  ir, 100*b* (*C. l. w.*)
 ceirbsire, 100*b*
 ceist, 105*a* (cest, *C. l. w.*)
 c  l, 108*a*
 cell, 100*b* (cel, *C. l. w.*)
 cen, 131
 cena  lugud, 110*b*
 cen  l, 110*b* (St. 676)
 cen  lach, 110*b*
 cen  lae, 110*b*
 cercenn, 100*b* (*C. l. w.*)
 c  rchaill, 100*b* (*C. l. w.*)
 cercol (*acc.*), 100*b*
 cetlaid, 108*a* (St. 3)
 cilic, 100*b*
 cimb  l, 101*b*
 cingcidis, 104*b*
 cingices, 105*a* (cingeiges,
C. l. w.)
 circumflex, 100*b*
 ciuil (*gen.*), 108*a*
 cis, 100*b* (*C. l. w.*)
 * cladibas, 108*a*
 claideb, 108*a*
 clais, 100*b*
 clechir, 100*b*
 clechti, 100*b*
 cl  rech, 100*b* (*C. l. w.*)
 climata (*pl.*), 100*b* (*C. l. w.*)
 clocc, 100*b*
 clochmuer, 100*b*
 cl  i, 108*a*
 cl  m, 104*b* (*C. l. w.*)
 cn  m, 108*a* (St. 269)
 cnu, 110*a*
 co  hull, 101*a* (*C. l. w.*)
 coibse, 101*a* (*C. l. w.*)
 coic, 101*a*, 122 (St. 776;
C. l. w.)
 c  is (*dat.*), 100*b* (St. 434,
acc. sing.)
 coisecrad, 101*a* (St. 880)
 colcaid, 101*b* (*C. l. w.*)
 coll, 101*a*
 colomna (*nom. pl.*), 100*b*
(C. l. w.)
 colum, 100*b*
 columnat, 100*b*

com-, 126
 comacus, 109*a*
 comadas, 101*a*
 comadasogod, 101*a*
 comacisiu, 109*a*
 comalnadar, 111*a*
 comarbus, 116*b*
 comarpe, 116*b*
 commescatar, 111*b*
 companacht, 101*a*
 comparit, *pl. -iti, gen. -ite*,
 101*a*
 conflechtsaighthi, 101*a*
 congnam, 110*b*
 conoscaigesiu, 111*b*
 conrobam, 131
 conrochra, 131
 conrogbaid, 131
 conroscaigissiu, 111*b*
 conson, *gen. consine*, 101*a*
 corcur, 105*a*
 corgais, 105*a*
 coro-, corro-, conro-, 131
 corp, 108*a* (*C. l. w.*)
 cos, 108*a*
 cosmail, cosmuil. cosmil,
 * consamali, 109*a*
 credal, 101*a*
 crepscuil, 101*a* (*C. l. w.*)
 cresen, 100*b* (*C. l. w.*)
 cretem, 124
 cretes, crettes, creites, *pl.*
 cretite, *v. cretim*, 108*a*
 cretim, 108*a*
 criad, 101*a*
 criathar, 108*a* (St. 700;
C. l. w.)
 crichaib, 113*b*
 cride, 109*b* (St. 1102)
 crismal, 100*b*
 crocann, crocenn (*leg.*
 croccan), 115*a* (St. 56)
 croch, 101*a*
 cruim, 110*a*, 117*b*, 119*a*
 cruimther, 105*a* (*C. l. w.*)
 c  , 110*a*
 cuach, 100*b* (*C. l. w.*)
 cuicenn, 101*a* (cuicenn, *C.*
l. w.)
 cuigel, 101*a*
 cuilennboc, 117*a* (St.
 498)
 cuimlengaithi, 113*a* (St.
 gl. N   45, *p. 147*)
 cuisil, 101*a* (*C. l. w.*)
 c  l, 108*a* (*C. l. w.*)
 cumace, 109*a*, 116*a*, 123
 cumacht, 109*a*, 116*a*
 cumachtach, 116*a*, 124
 cumacht(a), 116*a*

cumachtagimm, cumacht-
 aigim, 124
 cumachtchu, *comp. v.*
 cumachtach, 116*a*
 cumaing, 116*a*
 cuman (*v. ni cuman lim*),
 111*a* (St. 111)
 cumang, 109*a*, 116*a*, 123
 cummase, *gen. cummise*
 111*b*
 cumsciget, 111*b*
 cum  ing *v. cumaing*, 116*a*
 cupris, 101*b*
 cusecar, 101*a*
 cute, 105*a*
 dairde, daurde, 110*a* (St.
 554)
 dam (*root*), 110*a*
 damils  , 111*a*
 dark (*root*), 113*a*
 daur, 110*a* (St. 554)
 daurauch, 110*a* (St. 554)
 daurde, dairde, 110*a* (St.
 554)
 d  ccu, 127
 demne, *gen. pl. v. demu  n*,
 101*b*
 demu  n, *v. demne, (gen.)*,
 101*b* (*C. l. w.*, *deman*)
 * denge, *v. tenge*, 123
 d  n  m, 112 (St. 899)
 d  r, 110*a*
 deruce, 110*a* (St. 554)
 derwen, 110*a*
 discipul, 101*b* (deiscipuil,
n. pl., C. l. w.)
 dess, 110*a* (*leg. des*, St.
 386)
 d  t, 110*a*
 di, 108*b*, 120
 dia (dies), 110*a* (St. *p.*
 163; *dia, C. l. w.*)
 dia (Deus), 110*a* (St. 81)
 diabul, 101*b*
 diblide, 101*b*
 dictat  ir, 101*b*
 digaim, 101*b*
 dil, diliu, d  ilem, 115*a* (St.
 1120)
 d  les, 115*a*
 dilui, 101*b*, 115*a*
 dinair, 101*b*
 diprecoit, 101*b* (*C. l. w.*)
 discreit, 101*b* (*C. l. w.*)
 do, du, 115*b*, 131 (St. 570)
 do-, *v. du-*, 108*b* (St. 85)
 doabsem, 127
 doathirge, *v. taidirge*,
 116*a*

- doaurchanaim, 108a (St.,
doaurchanim, 704, 837)
dodálim, 115a
doforsat, 112a
dofuibnimh, 113a
dogéntar, 110b
dogníu, 110b, 127 (St. 908)
dóib, doib, 127
doiseich, 112a
-dóit, 124
domnach, 101b (*C. l. w.*)
doménarsa, 111a
domoiniur, 111a
domuinursa, 111a
do-omalgg, *v. omalg*, 111a
dorche, *f. pl.*, 117b (St. 331)
dorósat, 112a
dorus, 110b
dosaig, 112a
doseich, 112a
drac, 101b (*C. l. w.*)
draigen, 115b (St. 559)
driss, 115b (St. 587)
dristenach, 115b (St. 587)
droch, drog, 114b
drochgním, 114b
drochgnímu, *acc. pl.*, 114b
drog, droch, 114b
droighean, 115b
du, do, 115b, 120, 131 (St. 570)
du-, *v. do-*, 108b, 120, 131 (St. 85)
dúib, 127
duibsi, 127
duine, 122 (St. 89)
dún, 117b (St. 674)
dúr, 101b

é, *v. sí*, ed
ech, 110b, 122 (St. 17)
ecolso, ecilse, *gen.*, *v.*
 aeclis, 101b
ed, *v. é*, sí, 126
-em, 126
emnatár, 102b (St. 1010)
eo, 118a
epil, 113b
epistil, 102a (*C. l. w.*)
epscop, 102a (St. 982; *C. l. w.*)
erdaireigidir, 113a
erdarcai, *pl. v. airdirce*,
 113a
erdire, *v. airdirce*, *irdirce*,
 113a
erriu, eru, 127
escalchaill, 102a (St. 115)
estar, 110b

etar, etir, *v. itir*, 108b
etardibe, 113b
etargeiúin, 110b
etargne, etarene, 110b
etarru, 127
ethemlagas, 102a
etirdibnet, 113a
-etu, *v. -atu*, 124

fagde, 102a
faigen, 106b
fáith, 109b (St. 2)
fedb, 107a, 112b
fellsube, 104b
felsub, 104b (St. *p.* 159)
femin, 102a (*femen*, *C. l. w.*)
fén, 118b
fer, 112b, 121
fers, *gen. fersa*, *ferse*, 106b
ferte, *nom. pl.*, *v. ferto*,
 107b
ferto, ferte, *gen.*, 107b (*C. l. w.*)
fescor, 112b (St. 224; *C. l. w.*)
fetarlaice, fetarlice, fetar-
 licce, 107a
fí, 108b
fiadnisce, 118b (St. 959)
fíal, 106b
fiar, *v. sethar*, 112a
fích, 112b
ficuldae, 102a
fid, 119a
fidbocce, 117a
figil, 107a (*C. l. w.*)
fimf, 122
fin, finn, 107a (*C. l. w.*)
fíne, 107a (*C. l. w.*)
fír, 106b
* fíras, 121
fíraib, forib, 127
firtu, *acc.*, *v. ferto*, 107b
fis, 107b (*C. l. w.*)
flaith, *gen. flatha*, *flatho*,
 116b
fla(i)themnacht, 116b
flaithemnas, 116b
flur, 118a
focul, 107b (*C. l. w.*)
fodail, fodil, 115a
fodaimimse, 110a
fodáil, 115a, 122
fodlaidi, 115a
fognám, 110b (St. 815)
fogní, 110b
foirethe, 108a
folcaim, folcainm, 119b
 (St. 1045)

fondrodil, 115a
foraib, forib, forib, 127
forcanim, forchanim, 108a
forchun, 108a, 127
forcital, forcetal, 108a (St. 837)
forcitl(a)id, forcetlaid,
 108a (St. 837)
forlán, 111a
forlongis, 103a
forodil, 122
forru, 127
fuirib, *v. foraib*, 127
fulang, 113a

gab (*root*), 114a
gabáil, 123
gabor, 114a, 119b, 123 (St. 372)
gabimh, 119b
gabul, 117b (St. 135)
gaide, 117b (St. 216)
gaimred, 110b
géd, 115b
gein, *gen. geine*, 110b
geinddae, 110b
geinti, *v. genti*, 102b
geinti, *pl.*, 102b (*géinte*,
 C. l. w.)
geintlecte, *gen. fem.*, *v.*
 gentlide, 102b
geintlíde, 102b
gell, 117b
gen (*root* Skr. *jan*), 110b
gen (*root* Skr. *jná*), 110b
gen, *dat. giun*, 113b
genitiú, 102b
genti, *v. geinti*, 102b
gentlide, 102b
gentar, genthir, 110b
gerind, 102b
giall, 117b (St. 216)
glass, glas, 117b (St., *note*,
 p. 91)
gluais, 102b
glún, 119b
gné, 110b
gnethid, 110b
gním, 110b (St. 908)
gníu, 128
grád, *gen. gráid*, 102b (*C. l. w.*)
graiú, 102b
grazacham, 102b (*C. l. w.*)
guidimm, 122 (St. 870)

heritic, *pl.*, 102b
háirn, *gen. v. iarn*, 118a
ho buiduib, 117a
hodid, *gen. v. uathid*, 118b

- (h)omaldóit, *v.* umaldóit, 102b
 horpamin, (*pl.*) *v.* orpam, 116b
 hothead, *v.* (h)uathath, etc. 118b
 húathad, *v.* (h)uathath, etc.), 118b
 huathath *acc.*, *v.* (h)uathath, etc. 118b
 huathathi, *fem. acc. pl.*, *v.* úaithed, 118b
 (h)umaldóit, *v.* umaldóit, 102b
 iach, 102a (St. 216)
 iarm-, 126
 iarn, *v. gen. híarn*, 118a (St. 608, 812)
 -ib, *v.* -aib, 127
 ibim, 108b
 id, 102b
 ídol, 102b (*C. l. w.*)
 ifurnn, *gen. ifrnn*, 103a (iffearn, iffern, St. 519)
 il, *v. lia*, 111a (il, St. 13)
 imb-, 99a
 indibe, 113b
 imdibenar, 113a
 immefolngai, immefolngai, immolngai, 113a
 immeforling, imforling, 113a
 -imem, 126
 immeruidbed, 113b, 130
 immumruibed, 130
 immolngai (see immefolngai, etc.), 113a
 ind-, 99a, 123 (St. 734)
 indatbendachub, 100a, *v.* bendacht
 ind-figor, 102a
 indib, 127
 indid, 127
 indlach, 113a
 indlung, 113a
 infinit, 103a
 ingor, 99a (St. 68)
 inis, *gen. inse*, 108b
 init, 103a
 innarbar, 117a
 innerese (*acc.*), 102b
 innoc(h)t, 111b
 innurid, 125
 inobar, *v. saibes*, 104a
 inolég, 103a
 insádaim, 112a
 insce, 112a
 inte, 127
 interiecht, 103a
 intesi, 127
 iatiu, 127
 -ire, *v. -aire*, 124
 irgnac, 110b
 isind-airmm, *dat. v. arm*, 99b
 isind-ithlaind *dat.*, *v. land*, 118a
 itarginim, 110b
 ith, *gen. etha*, 108b, 123 (St. 1037)
 ithim, 108b, 110b, 116b, 123 (St. 40)
 ithirge, *v. aithirge*, 116a
 itir, *v. etir, etar*, 108b
 iúgsuide, 103a
 labar, 118b
 lucht, 108b
 laech, 103a (*C. l. w.*)
 lagait, 111a
 laigiu, lugu, 111a (St. 923)
 láine *v. láne*, 111a
 lán, 111a (St. 13)
 láne *v. láine*, 111a
 lánad, 122
 land, *dat. isind-ithlaind*, 118a (St. 132)
 lang (*root*), 113a
 lanmair, 111a
 lar, 118a
 lebor, *v. libur*, 103a (libar, St. 371; *C. l. w.*)
 lechdach, 103a (St. 1071)
 lecht, 103a (*C. l. w.*)
 led, leth, 111a
 legend, 103a (St. 853)
 legtoir, 103a
 * léic, 108b
 léicci, 108b
 léim, 118a
 leth, led, 111a (St. *p.* 156)
 lethan, 111a (St. 13, 925)
 lethscripul, 105b
 li, 114a
 lia, *v. il*, 111a
 liac, 108b (liacc, St. 133, 573, *p.* 156)
 libur, *v. lebor*, 103a
 lígim, 111a
 lim (ne cuman lim), 111a
 lín, 103a (St. 863; *C. l. w.*)
 línad, 111a, 122
 línaire, 111a
 liter, 103a (letir, *C. l. w.*)
 loathar, 118a
 lobur, 108b
 loc, 103a
 loing, 103a
 loingtech, 113a
 long, 103a (St. 574; *C. l. w.*)
 loth, *gen. loithe*, 108b
 lúacharnn, 103a
 lugimem, 111a (St. 923)
 lugu (see laigiu), 111a
 lúirech, 103a (St. 154)
 lunáir, 103a
 macc, *v. mang (root)*, 115b
 macc (filius), 115b
 máer (*v. mór-máer*), 103a (*C. l. w.*)
 magistr, *nom. pl.*, magistru, *acc. pl.*, 103a (St. 365)
 mainn, 103b
 maldachæ, 103a
 maldacht, 103a (St. 915)
 maledic, 103a
 malg (*root*), 111a
 man, 103b
 man (*root*), 111a
 mauach, 103b (*C. l. w.*)
 mang (*root. v. macc*), 115b
 mar (*root*), 111a
 mar, 115b (már, St. 663)
 marb, 111a (St. *p.* 159)
 marc, 118a
 martre, *fem. pl. martri*, 103b (St. 738; *C. l. w.*)
 masc (*root*), *v. misc*, 111b
 mascul, 103b
 matal, 103b
 máthir, 111a
 matin, 108b (*C. l. w.*)
 mé, me, 126
 mebuir, 103b
 medón, 111a
 meince, 116a
 meirdrech, 103b
 melim, 111a
 membr (*pl.*), 103b
 mencain, 116a
 menice, menic, 116a
 mertrech, 103b (*C. l. w.*)
 messa, *v. mi-*, 118a (St. 1117)
 metair, metir (*gen.*), 103b (metuir, *C. l. w.*)
 mí, 111b (St. 1117)
 mí-, 118a
 mís, 103b (*C. l. w.*)
 midiur-sa, 108b
 mil, 108b
 míl, 103b
 míle (*fem.*), 103b

mindechichthiu, 103b	noacuitigfide <i>v. acuit</i> , 99a	óthud, <i>dat.</i> , <i>v. uathuth</i> , 118b
mindchigitir, 103b	nobbendachat, 100a	
mindeclu, 103b	nobirpaid, 116b	
mirt-chail, 103b (St. 115)	nocht-chenn, 116a	pagan, 104a
misc (<i>root</i>), <i>v. masc</i> , 111b	noct, 111b	páin, 104a (<i>C. l. w.</i>)
mistae, 111b (St. 1051)	nogigned, 110b	paiper, 104a
mo-, mu-, 131	nometarnigedar, 110b	pairche, 104a (<i>C. l. w.</i>)
mod, <i>v. muid</i> , mud, 103b	nomerpimm, 116b	pairt, 104a (<i>C. l. w.</i>)
molt, 103b	nomisligur, 124	pais, 104b (<i>C. l. w.</i>)
mong, 118a	not, nota, 104a	papa, 104a
monistre (<i>gen. pl.</i>), 103b	notail, 113a	partus, 104a
mór <i>v. máer</i> , 103a (St. 663)	notaire, notire, 104a	peccad, 104b (<i>C. l. w.</i>)
moralus (<i>dat.</i>), 103b	notlaic, 103b (<i>C. l. w.</i>)	pellec, 104b
mori, 111a	nu-, no-, 131	pén, <i>v. pían</i> , 104b
moru, 119b (móru, St. 1020)	nú (nua), nue, nuae, núide, 111b (St. 21, 803)	penenit, 104b
mu-, mo-, 131		pennit, 104b (pennait, <i>C. l. w.</i>)
mucc, 118a (St. 1029)	óa, 118b (St. 758)	persan, 104b (St. 87)
mud, <i>dat.</i> , <i>v. mod</i> , 103b	obair, 104a	pían, <i>v. pén</i> , 104b
muid, <i>gen.</i> , <i>v. mod</i> , 103b	oblann, 104a	piss, 104b (<i>C. l. w.</i>)
muin-torc, 106b (St. 744)	ocht, 122	plag, 104b
muir, 111b (St. 860)	ochte, octe, 109a	popul, 105a
muirtchenn, 103b (<i>C. l. w.</i>)	óclachdi, 110b (St. 758)	port, 105a (St. 676, 725; <i>C. l. w.</i>)
mulenn, 103b (St. 701; mülenn, <i>C. l. w.</i>)	ócmil, 111a (St. 758)	posit, 105a
múlu (<i>acc. pl.</i>), 103b (St. 295)	ocus <i>v. accus</i> , 109a	predach, 105a
múr, 103b (<i>C. l. w.</i>)	ocus, ocuis (<i>et</i>) <i>v. acus</i> , 109a	predchim, 105a
mút, 103b	og, 112b (St. 955)	precept, 105a (<i>C. l. w.</i>)
	óin, óen, 111b	preceptóir, 105a
	oipred, 104a (St. 889)	predag, 105a
	oipretho, <i>gen.</i> , <i>v. oipred</i> , 104a	prelait, 105a
	óir, <i>gen.</i> , <i>v. ór</i> , 99b	prim, 105a (<i>C. l. w.</i>)
nachiberpidsi, 116b	oirlech, 104a	proind, 105a (<i>C. l. w.</i>)
nachimrindarpai-se, 117a	óis, <i>v. áis</i> , 109a (St. 812)	prolach, 105a
nát, 104a	oissa, oessa, <i>gen.</i> , <i>v. áis</i> , 109a	promfidir, 105a
nathir, 114a (St. 88)	oistreoir, 104a	pronomen, 105a
naue (<i>gen.</i>), noe, 108b	olachail, 104a	propost, 105a (<i>C. l. w.</i>)
nebthóbe, <i>v. nephthóbe</i> , 113b (St. 987)	olachrann, 104a	pupall, 104a
necht, 114a (St. 224)	(h)omaldóit, <i>v. (h)umal-</i>	púr, 105a (<i>C. l. w.</i>)
nem, 119a (St. 812)	dóit, 102b	purgatoir, 105a
nephthóbe <i>v. nebthóbe</i> , 113b	omalgg, (<i>v. do omalgg</i>), 111a	
nert, 108b	onóir, 102b	ra-, <i>v. ru-</i> , ro-, 130, 131
nessa, nesam, 114a (St. 1117)	ood, <i>v. uad</i> , 127	rád, 116b
neutor, 104a (neutur, <i>C. l. w.</i>)	optait, optit, 104a	rám, 105b
neutrálde, 104a	orait, 104a (oróit, <i>C. l. w.</i>)	ranglana, 130
ni-, 111a, 130	ord (ordd, ort, urt), 104a (St. 943; <i>C. l. w.</i>)	rastal, 105a
niae, 114a	orpam, <i>v. pl. hór</i> pamin, 116b	rect, recht, 114b
nicumanlim <i>v. ni, cuman</i> , lim, 111a	orpe, <i>v. arpa</i> e, 116b	reilie, 105b (relic, <i>C. l. w.</i>)
nicumscaichti, 111b	orthain, <i>acc. sing.</i> , 104a (<i>C. l. w.</i>)	remi-, 126
nid, 114a	ort, <i>v. ord</i> , 104a	ri, 114a
nimb, 104a (<i>C. l. w.</i>)	ós, <i>v. úas</i> , uch, 118a	riagul, riagol, 105b (St. 61)
niromdibed, <i>v. roimdibed</i> , 130	othatnat, 118b	ribar, 101a (<i>C. l. w.</i>)
níule <i>v. níulu</i> , 113		rig, <i>gen.</i> , <i>v. rí</i> , 114a (St. 1036)
níulu, <i>dat.</i> (in níulu) 111b		ro-, <i>v. ra-</i> , ru-, 130, 131
		roaimnicht, 130
		roairptha, <i>pl. v. rærbad</i> , 117a

- robeimmis, 130
 robia, robbia, ropia, 130
 rochumscigther, 111*b*
 rocomalnither, 130
 roerbád, 116*b*
 rofetar 123
 rogád, 122
 rogen(a)ir, 110*b*
 roiceu, 127
 roimdeb, 130
 rolín, 111*a*
 rolabrastar, 128
 rommunus, rommúnus, 111*a*
 rondpromson, 105*a*
 ronoibad, 130
 ropia, *v.* robia, 130
 rorélus, 130
 roschaill, 105*b*
 rostaé, 105*b*
 rostán, 105*b*
 roth, 111*b*
 ru-, *v.* ra-, ro-, 130, 131
 rucestaiger, 128
 rún, 118*b*

 sabaltair, 105*b* (*C. l. w.*)
 saboit, 105*b* (*C. l. w.*)
 sacardd, 105*b* (sacart, *C. l. w.*)
 sacc, 105*b*
 sacorbaic, sacarbaic, 105*b* (*C. l. w.*)
 sad (*root*), 112*a*
 saí, 109*a*
 saibes (saibes inobar), *v.* inobar, 104*a*
 saichdetu, 112*a*
 saiged, 112*a*
 saiges, 112*a*
 saiget, 108*b* (St. 214)
 saigid, saiged, 112*a*
 saigim, 112*a*
 saigul, 105*b* (St. *p.* 146)
 saile, 105*b* (St. 651; *C. l. w.*)
 sailestar, 105*b* (soilestar, *C. l. w.*)
 *saillim, 109*a*
 sailm, *pl.*, *v.* salm, 105*a*
 sak (*root*—to say), 112*a*
 sak (*root*—to follow), 112*a*
 salann, 111*b* (St. 977)
 salm, 105*a* (*C. l. w.*)
 salmu, *acc.*, *v.* salm, 105*a*
 salt, 105*b* (*C. l. w.*)
 saltair, 105*a*
 saltir, *dat.*, *v.* saltair, 105*a*
 salto, *gen.*, *v.* salt, 105*b*
 saltrach, *gen.*, *v.* saltair, 105*a*
 sam, 118*b*
 samail, samal, *samali, *samali, 109*a*
 sancht, 105*b* (St. *p.* 161; *C. l. w.*)
 sapati, *pl.*, *v.* saboit, 105*b*
 scath, 113*b*
 sciath, 109*a*
 scipar, 104*b*
 scol, 105*b* (St. 338)
 scoloca, 118*b*
 scribend, 105*b* (St. 853)
 scrín, 105*b* (*C. l. w.*)
 scule, *gen.*, *v.* scol, 105*b*
 sech, 109*a*
 sechem, 112*a*
 sechintid, 112*a*
 sechtmaine, 105*b*
 seib, 102*a* (*C. l. w.*; St. 109)
 seinser, 105*b* (seindser, *C. l. w.*)
 séit, *dat.*, *v.* sét, 118*b*
 séitchi, *dat.*, *v.* sétche, 118*b*
 sēn, 103*a* (*C. l. w.*)
 sen, 112*a* (St. 735)
 senatóir, 105*b*
 sens, 105*b*
 seol, sóol, 118*b*
 septien, 106*a*
 sét, 118*b* (St. 470, 1073)
 sétche, 118*b*
 sethar, siur (siar, fiar), 108*a*, 112*a*
 seúit, seuit, *pl.*, *v.* sét, 118*b*
 sí, *v.* é, ed, 126
 síansib, *dat. pl. v. sens*, 105*b*
 siar, *v.* sethar, 112*a*
 síd, 113*b*
 síl, 116*b*
 sillab, 106*a*
 siur, *v.* sethar, 112*a* (St. 216)
 slechtaim, 102*a*
 slice, 118*b*
 slici, *pl.*, 118*b*
 snáthe, 118*b* (St. 817)
 snathiu, *dat.*, *v.* snáthe, 118*b*
 snechti, 116*b*
 soillse, 112*a*
 sóol, *v.* seol, 118*b*
 sossad, 112*a*
 spiracul, 106*a* (*C. l. w.*)
 spirut, 106*a* (*C. l. w.*)
 sponge, 106*a* (*C. l. w.*)
 srathar, 106*a* (St. 262)
 srian, 102*b* (St. 109, 1039)
 srogell, 102*a*
 sruth, 111*b* (St. 999)
 stán, 106*a*
 su-, 109*b*, 120
 suan, 111*b*
 such, 118*b*
 suide, 112*a* (St. 812)
 suidiguth, suidigud, 112*a*
 suist, 102*b* (sust, *C. l. w.*)
 superlait, superlit, *pl.* superlati, 106*a*
 surrn, 102*b*

 ta, 127
 tablaire, 106*a*
 taidirge, *v.* doathirge, 116*a*
 taig, *dat.*, *v.* teg, 112*a*
 taigae (idultaigae, *gen.*, *v.* teg) 112*a*
 *taigi, *v.* teg, 112*a*
 tairm-, 126
 talland, 106*a*
 tám, 106*a* (*C. l. w.*)
 tana, 112*b* (St. 1017)
 tar, 109*b*, 120
 tarb, 109*b*
 táu, 127
 tech, *v.* teg, 112*a* (St. 569)
 teg, *v.* tech, 112*a*
 teirt, 106*b* (*C. l. w.*)
 teis, 106*b*
 tellrach, *gen.*, *v.* telluir, 106*a*
 telluir, 106*a* (tellur, *C. l. w.*)
 temel, 112*b*
 tempul, 106*b*
 tene, 119
 tengad, *pl.*, *v.* tenge, 114*b*
 tenge, *gen. sing.*, 114*b*, 123
 teoir, 106*b* (St. 744; *C. l. w.*)
 tercital, 108*a*
 tesc, 101*b*
 test, 106*b* (teist, *C. l. w.*)
 testimin, 106*b* (testimon, *testimoin*, *C. l. w.*)
 tiach, 106*b* (St. 41, 371)
 tiagu, 127
 tigerne, *dat.* tigerni, 112*b*
 timpan, 106*b*
 tir, 109*b* (St. 703)
 titlu, *acc. pl.*, *v.* titul, 106*b*
 titul, titol, 106*b*
 tobe, 113*b*

togu, 127
 tort, 106*b* (*C. l. w.*)
 tot-mael, 106*b*
 tracht, 106*b*
 trag (*root*), 113*a* (*St. 74*)
 traig, 113*a* (*St. 74*)
 tré, tri, 118*b*, 120
 trebun-súide, 106*b*
 tremi-, 126
 tri, *v.* tré, 118*b*
 trindoit, 106*b*
 tú, tu, 126
 túath, 112*b* (*St. 423*)
 tucu, tuccu, 127 (*St. p.*
 165)
 tuib, *gen.*, 106*b*
 tuinech, 106*b* (*C. l. w.*)
 tuir, 106*b*
 tus-lestar, 106*b* (*St. 1134*)

uad, ood, 127
 uadi (*fem.*), 127
 uadib, uaidib, *dat.*, *v.* uad,
 127
 úaithed, 118*b*
 uan, 109*b*
 uar, 102*b*
 úas, *v.* ós, 118*a*
 uathataib, *dat. pl.*, *v.* úaith-
 ed, 118*b*
 uathath, uathad, *v.* (h)ua-
 thath, 118*b*
 uathid (hodid), *gen.*, *v.*
 (h)uathath, 118*b*
 uathuth, *dat.*, *v.* óthud,
 118*b*

uch, *v.* ós, *and* úas, 118*a*
 uile, 118*b*
 uilt, *acc.*, *v.* ult, 106*b*
 ult, 106*b*
 umal, 102*b*
 (h)umaldóit, *v.* humaldóit
 102*b*
 ungae, unga, 106*b*
 úrde, 109*b*
 urt, *v.* ord, 104*a*

*vlati, 116*b*

Middle Irish.

aibherseóir, 99*a* (*St. 517*)
 banprioir, 105*a* (*St. 23*)
 biait, 100*a*
 cabellanacht, 100*a* (cabil-
 lanacht, *St. 172*)
 command, 101*a*
 coróin, 101*a* (*St. 75*)

crisdal, 101
 fairche, 104*a* (*C. l. w.*)
 fersaid, 106*b* (*St. 568*)
 firmamint, 102*a* (*St. 749*)
 gredáil, 102*b* (*St. 854*)
 instrumint, 103*a*
 orc (?), 105*a* (*C. l. w.*)
 proisté, 100*a* (*St. 852*)
 pústa, 106*a*
 sdair, 102*b* (*St. 84*)
 senadh, 106*a* (*St. 551*;
 senod, *C. l. w.*)
 sinistir, 102*a*
 sitbcal, 106*a* (*St. 241*; si-
 thil, *C. l. w.*)
 soifist, 106*a* (*St. 842*)
 soiler, 106*a* (*St. 740*)
 spín, 106*a*
 stanamhail, 106*a* (*St. 610*)
 taibherne, 106*a* (*St. 169*)
 tital, 106*b* (*C. l. w.*)

Modern Irish.

astaig, 112*b*
 meilg, 111*a*
 pit, 104*b*

Welsh.

aball, 115*a*
 aballen, 115*a*
 abbadeu, *pl.* 99*a*
 abl, 102*b*
 acen, 99*a*
 agos, 109*a*
 alarch, 107*a*
 all, *v.* allt, 99*a*
 alldut, *v.* *pl.* alltudion,
 109*a*
 allor, 99*a*
 allt, alt, all, 99*a*
 alltudion, *pl.*, *v.* alldut,
 109*a*
 amherawdyr, 102*b*
 amherodraeth, 102*b*
 amherodres, 102*b*
 amprioira, 116*a*
 angor, 99*a*
 aniueil, *v.* *pl.* anyueilyeit,
 99*a*
 aniueileit, anniuileit, *v.*
 anyueilyeit, 99*a*

anniuileit, *v.* aniueileit,
 anuab, 124
 anyueilyeit, *pl.* *v.* aniueil,
 aradr, 99*a*
 araut, 104*a*
 archescyb, *pl.*, 102*a*
 arfeu, *v.* arueu, 99*b*
 ariant, *v.* ariant, 99*a*
 armel, 99*b*
 arueu, *v.* arfeu, 99*b*
 ariant, *v.* ariant, 99*b*
 assen, 99*b*
 aual, *pl.* aualeu, aueu,
 115*a*
 auon, 107*b*
 auonyd, 107*b*
 -awd, -awt, 128
 awel, 107*b*
 awr, 102*b*
 awst, 99*b*
 awyr, 107*a*

bad, *pl.* badeu, 117*a*
 bagl, 99*b*
 bahell, *v.* buyall, 117*a*
 baraf, baryf, 99*b*
 barg, 99*b*
 barwn, 100*a*
 baryf, *v.* baraf, 99*b*
 bathor, 100*a*
 bedeu, 108*a*
 bedyd, 99*b*
 bendicetic, 100*a*
 bendith, 100*a*
 bereu, 107*b*
 blodeu, 117*a*
 bodin, *pl.* bodiniou, 117*a*
 bord, *v.* bwrđ, 117*a*
 boutig, 108*a*
 brag, 100*a*
 brawt, brawt, 109*b*, 116*a*
 breich, 100*a*, 108*a*
 brodyr, *pl.* *v.* braut, 109*b*
 buch, 108*a*
 bud, 117*a*
 budicaul, 117*a*
 budugawl, 117*a*
 buyall, *v.* bahall, 117*a*
 bwa, 117*a*
 bwl, 100*a*
 bwrđ, *v.* bord, 117*a*
 bwystuil, 100*a*
 byd, 128
 bydaf, 112, 128
 bydin, 117*a*
 bydwn, 128
 byleynyeit, *pl.* 107*a*
 byrdeu, *pl.* *v.* bwrđ, 117*a*
 byw, 109*b*
 bywyd, 109*b*

cadeir, 100b
 cadwyn, 100b
 caeth, 100a
 calamennou, 100a
 callaur, 100a
 cam, 110a
 cancher, 100a
 cann, 108a
 cannwyl, 100a
 car, *v.* carr, 117b
 carbwncl, 100a
 cardotta, 100a
 cared, 119a
 carr, *v.* car, 117b
 carrei, *v.* corruui, 101a
 cath, 100b
 cawg, 100b
 caws, 100b
 celeel, 101b
 cenitol, 110b
 cenitolaidd, 110b
 cepi-ster, *v.* kebyster, 100a
 ceroenhon, 100b
 cestill, cestyll, 100b
 chwaer, chwior, *pl.*, *v.*
 chwior, 112a
 chwior, 108a, 112a
 circhinn, 100b
 cledif, cledyf, 108a
 cloen, *pl.*, 108a
 coc, 101a
 coch, *pl.* cochyon, 100b
 cogail, 101a
 coll, 101a
 colenn, 101a
 coronawc, 101a
 corruui, *v.* carrei, 101a
 craff, 117b
 craffa, 117b
 crauell, 115a
 creaticaul, 101
 crefft, 117b
 cret, 108a
 criched, 113b
 crochann, 115a
 cristawn, 100b
 cruitr, 108a
 crych, 113b
 cudyaw, 110a
 cultel, 101b
 cultir, 101b
 cussan, 117b
 cwlitor, 101b
 cwydaw, 108a
 cyllell, *pl.* cylleill, *v.* kyl
 leil, 101b
 cymhar, 101a
 cymsc, 111b
 cymun, 101a
 cyson, 101a

dacrion, 110a
 dagreu, *pl.* 110a
 danned, *pl.* 110a
 dar, *v.* *pl.* deri, 110a
 datkann, 108a
 -daut, dawt, *v.* -taut,
 124
 decum, degum, 101b
 dehou, deheu, 110a
 derwen, 110a
 desko, 101b
 di, 108b
 didaul, 115a
 diffenu, 101b
 diffwyth, 102b
 dihu, *v.* diu (*dies*), 110a
 din, 117b
 discl, 101b
 disgynnu, 101b
 dispeilaw, 106a
 diu (*dies*), *v.* dihu, dyw,
 dyd, 110a
 diu (*Deus*), *v.* dyhu, dyu,
 dyuu, duw, duhu, duo,
 110a
 doeth, 101b
 doethou, 101b
 doguomisuram, 103b
 dolur, 101b
 dor, *pl.* doreu, 110b
 doythion, doeth, 101b
 draen, 115b
 dreic, *pl.* dreigeu, 101b
 drog, 115a
 drogu, 115a
 dros, *v.* trus, 109b
 drus, 110b
 drwc, 114b
 drws, 110b
 drycket, 114b
 dryssien, 115b
 duhu, *v.* diu, 110a
 duo, *v.* diu, 110a
 dur, 101b
 duw, *v.* diu, 110a
 duyauul, 110a
 dyd, *v.* diu (*dies*), 110a
 dyhu, *v.* diu (*dies*)
 dyrys, 101b
 dyscyl, disgyl, 101b
 dyu, dyuu, *v.* din, 110a
 dyw, *v.* diu (*Deus*), 110a
 eccluis, 101b
 ed, *v.* yd, 121, 130, 131
 eglwys, 101b
 egr, 99a
 egwyddor, 99a
 ehawc, 102a
 elestr, 105b

eliffeint, 102a
 elin, 110b, 113
 emendassant, 102a
 enw, 107a
 epscip, *pl.* *v.* escyb, 102a
 erekafael, 130
 erw, 107a
 escolectaut, 105
 escoleycyon, *v.* *pl.* yscow-
 leigyon, 105b
 escyb, *v.* epscip, 102a
 eskemun, 102a
 eskenho, eskynho, 105b
 estauell, *v.* ystauell, 106a
 eur, 99b
 ffa, 102a
 ffaowyd, 102a
 ffenigl, 102a
 ffer, 108b
 ffiol, 104b
 fflam, 102a
 ffb, 102b
 ffol, 102a
 fforch, 102b
 fforest, 102a
 ffrowyll, 102a
 ffwyn, 102b
 ffurf, 102a
 ffust, 102b
 ffustawd, 102b
 ffynnawn, 102a
 fin, 102a
 finnaun, 102a
 fos, foss, 102b
 fruinn, 102b
 frut, 111b
 fruy, 102b
 frwt, *v.* frut, 111b
 fual, 102a
 funenneu, *pl.*, 102b
 funiou, *pl.*, 102b
 gaem, 110b
 gafar, 114a
 gallaf, 119a
 ganet, 110b
 gauar, 114a
 gayaf, 110b
 gerthi, 117b
 glin, 119b
 gofyn, 111a
 golchi, 119b
 gormes, *pl.* gormesseu,
 gormessod, 118a
 gorsedua, 112a
 gratell, 101a
 grawys, 105a
 gref, 102b
 grefiat, 102b

griduan, 102 <i>b</i>	iou, 111 <i>a</i>	llech, 108 <i>b</i>
gryd, 102 <i>b</i>	istrat, <i>v.</i> strat, 106 <i>a</i>	llegest, 103 <i>a</i>
grydiaw, 102 <i>b</i>		lleï, 111 <i>a</i>
gulan, 112 <i>b</i>	kaerllion, 103 <i>a</i>	lleidr, lleidyr, 103 <i>a</i>
guletic, 116 <i>b</i>	kaghellaur, kyghellaur,	llemhidyd, 118 <i>a</i>
guneyr, 110 <i>b</i>	100 <i>a</i>	llew, 103 <i>a</i>
guodeimisauch, 110 <i>a</i>	kalaned, <i>pl.</i> , 100 <i>b</i>	lleycyon, <i>pl.</i> , 103 <i>a</i>
gwain, 106 <i>b</i>	kanu, 108 <i>a</i>	lliw, 114 <i>a</i>
gweddw, 107 <i>a</i>	karchar, 100 <i>a</i>	llong, <i>pl.</i> llongeu, 103 <i>a</i>
gwennwyn, 106 <i>b</i>	karw, 108 <i>a</i>	lludedic, 108 <i>b</i>
gwenwynic, 106 <i>b</i>	* kassiau, <i>v.</i> keissaw, 108 <i>b</i>	llwfr, 108 <i>b</i>
gwerth, 116 <i>b</i>	kauacns, 109 <i>a</i>	llygat, 118 <i>a</i>
gwerthawr, 116 <i>b</i>	kaus, 100 <i>b</i>	llyghes, llynghes, 103 <i>a</i>
gwerthyd, 106 <i>b</i>	kebyster, <i>v.</i> cepister, <i>pl.</i>	llygorn, 103 <i>a</i>
gwiberot, 107 <i>b</i>	kebystreu, kebesteryeu,	llythyren, 103 <i>a</i>
gwir, 106 <i>b</i>	100 <i>a</i>	loggeu, loggou, <i>pl.</i> <i>v.</i> llong,
gwlat, <i>pl.</i> gwladoed,	keffyl, 110 <i>a</i>	103 <i>a</i>
gwledyd, 116 <i>b</i>	kegin, 101 <i>a</i>	
gwledic, 116 <i>b</i>	keissaw, 108 <i>b</i>	maer, 103 <i>a</i>
gwledyd, <i>pl.</i> , <i>v.</i> gwlat,	keleuyn, 100 <i>a</i>	mair, 103 <i>a</i>
116 <i>b</i>	kenedel, kenedl, kenedyl,	mal, 109 <i>a</i>
gwnaf, 110 <i>b</i>	110 <i>b</i>	manaches, 103 <i>b</i>
gwr, 112 <i>b</i>	kerwyn, 100 <i>b</i>	maru, 111 <i>a</i>
gwrach, 108 <i>b</i>	keryd, 119 <i>a</i>	medeginyaethu, 103 <i>b</i>
gwyllt, 119 <i>b</i>	* kessiaw, <i>v.</i> keissaw,	medhecyneyaet, 103 <i>b</i>
gwyrd, 109 <i>b</i>	108 <i>b</i>	medic, 103 <i>b</i>
gwystyl, 117 <i>b</i>	kenedac, 110 <i>b</i>	medwl, medol, 108 <i>b</i>
	kiwtawt, 100 <i>b</i>	medylyaw, 108 <i>b</i>
	kiwtawtwyr, 100 <i>b</i>	meitin (yr meitin), 103 <i>b</i>
	kolonen, 100 <i>b</i>	meldicetic, 103 <i>a</i>
	koveint, 101 <i>a</i>	melen, 119 <i>b</i>
haf, 118 <i>b</i>	krissant, 101 <i>a</i>	melin, melyn, 119 <i>b</i>
haliw, 105 <i>b</i>	kuyr, kwyr, 100 <i>b</i>	melineu, 103 <i>b</i>
ham, 118 <i>b</i>	kyfagos, 109 <i>a</i>	melynyon, <i>pl.</i> , <i>v.</i> melen,
he-, 109 <i>b</i>	kyffelyp, kyffelyb, 109 <i>a</i>	119 <i>b</i>
heb, 112 <i>a</i>	kyfoeth, kyuoeth, 116 <i>a</i>	meneich, 103 <i>b</i>
hedwch, 113 <i>b</i>	kyghellaur, <i>v.</i> kaghellaur,	menoent, 111 <i>a</i>
helic, 109 <i>a</i>	100 <i>a</i>	merch, 119 <i>b</i>
helym, helm, 115	kylleil, <i>pl.</i> , <i>v.</i> cyllell, 101 <i>b</i>	mererit, 103 <i>b</i>
henoid, 111 <i>b</i>	kyngryfet, 117 <i>b</i>	metrut, 103 <i>b</i>
hestaur, <i>pl.</i> hestoriou,	kynnhaeaf, 110 <i>b</i>	meun, 111 <i>a</i>
106 <i>a</i>	kyrchu, 100 <i>b</i>	milinon, <i>pl.</i> , <i>v.</i> melen, <i>pl.</i>
hestawr, 106 <i>a</i>	kyuoeth, <i>v.</i> kyfoeth, 116 <i>a</i>	melynyon, 119 <i>b</i>
hestoriou, <i>v.</i> hestaur, 106 <i>a</i>	kyuoethawc, 116 <i>a</i>	milwr, 103 <i>b</i>
heu, 116 <i>b</i>		mis, 111 <i>b</i>
heul, 112 <i>a</i>	laethauc, 103 <i>b</i>	moeh, 118 <i>a</i>
hewyt, 116 <i>b</i>	laiðver, 108 <i>b</i>	modreped, 111 <i>a</i>
heyrrn, 118 <i>a</i>	lamman, 118 <i>a</i>	mogau, <i>pl.</i> (leg. moggou),
hint, 118 <i>b</i>	lann, 118 <i>a</i>	118 <i>a</i>
histr, 104 <i>a</i>	laubael, 117 <i>a</i>	morthol, 103 <i>b</i>
hoedel, hoedyl, 108 <i>b</i>	laur, <i>v.</i> llawr, 118 <i>a</i>	morwyn, 119 <i>b</i>
ho(s)an, <i>pl.</i> hossaneu, 117 <i>b</i>	leeces, 103 <i>a</i>	mur, <i>pl.</i> muroed, 103 <i>b</i>
lucc, 118 <i>a</i>	lemenic, 118 <i>a</i>	mut, 103 <i>b</i>
huil, 118 <i>b</i>	litan, 111 <i>a</i>	mwng, 118 <i>a</i>
hun, 111 <i>b</i>	liuou, <i>pl.</i> , 103 <i>a</i>	mwys, 103 <i>b</i>
hwylbrenni, 115 <i>a</i>	llamp, 118 <i>a</i>	mynuir, 111 <i>a</i>
hwyr, 106 <i>a</i>	llanw, 111 <i>a</i>	mynych, mynnych, 111 <i>a</i> ,
	llawr, <i>v.</i> laur, 118 <i>a</i>	116 <i>a</i>
	llawn, 111 <i>a</i>	mynydd, 108 <i>b</i>
iarll, 115	lle, 103 <i>a</i>	myrd, 103 <i>b</i>
ieulhaf, 110 <i>b</i>		
ieuan, <i>pl.</i> ieucine, 110 <i>b</i>		
inis, <i>v.</i> ynys, 108 <i>b</i>		
iot, 110 <i>b</i>		

myrthw, 103*b*
 mys, *v.* mis, 111*b*
 mywn, 111*a*

nadolic, *v.* nodolyc, 103*b*
 neges, 104*a*
 neithawr, 104*a*
 nifer, *v.* niuer, 104*a*
 nimer, 104*a*
 niuer, *v.* nifer, 104*a*
 nodolyc, *v.* nadolic, 103*b*
 nouel, 104*a*

oedawc, *v.* oetawc, 108*b*
 oedwn, 128
 oen, 109*b*
 oes, 109*a*
 oet, 108*b*
 oetawc, *v.* oedawc, 108*b*
 ofrum, 104*a*
 ois, 109*a*
 oleu, 104*a*

padell, *r.* patel, 104*b*
 palf, 104*a*, 113
 pall, 104*a*
 pap, *pl.* papeu, 104*a*
 parchell, 105*a*
 part, parth, pard, 104*a*
 pasc, 104*a*
 patel, 104*b*
 pau, 104*a*
 pawin, 104*b*
 pawl, *v.* polyon, 104*a*
 pebreid, *v.* pybreid, 104*b*
 pebyll, 104*a*
 pechaut, 104*b*
 pedestyr, 104*b*
 pelechi, 104*b*
 penydyaw, 104*b*
 pererin, 104*b*
 peri, 104*a*
 person, 104*b*, 116*a*
 peth, 104*b*
 pethedic, 104*b*
 plumauc, 104*b*
 plycca, 104*b*
 poguisma, 104*b*
 polyon, *pl.*, *v.* pawl, 104*a*
 pont, 105*a*
 popuryes, pophuryes, 101*a*
 porffor, 105*a*
 porth, *v.* pyrth, 105*a*
 porthant, 105*a*
 porthes, 105*a*
 porthi, 105*a*
 porthmon, 105*a*
 post, 105*a*
 postoloin, 105*a*
 poues, 104*b*

priawt, 116*a*
 prif, 105*a*
 prud, 105*a*
 pryf, 110*a*
 pull, 104*a*
 punt, 105*a*
 pur, 105*a*
 purdu, 105*a*
 purgoch, 105*a*
 purwynn, 105*a*
 putein, 105*a*
 pwys, 104*b*, 106*a*
 pybreid, *v.* pebreid, 104*b*
 pyllawc, 104*a*
 pyrth, *pl.*, *v.* porth, 105*a*
 pysg, 104*b*
 pysgadwr, 104*b*

rascl, 105*a*
 re-, *v.* ry, 130
 rebriuasei, 130
 reith, reyth, reis, 114*b*
 rhwyd, 105*b*
 rogulipias, 130
 rud, 111*b*
 rygaffel, 130
 ryt yssu, 110*b*
 ry (ry echewit), *v.* re-, 130

saeth, 108*b*
 sant, *v.* *pl.* seint, 105*b*
 sarff, 109*a*
 scribl, 105*b*
 seint, *pl.*, *v.* sant, 105*b*
 snoden, 118*b*
 stebill, *pl.*, 106*a*
 strat, *v.* istrat, ystrat, 106*a*
 strotur, 106*a*
 strouis, 106*a*
 suh, 118*b*
 sumpl, 106*a*
 swllt, 106*a*
 swyf, 105*b*
 sych, 111*b*

taguel, *v.* tawel, 114*b*
 talu, 115
 tarater, taradyr, 109*b*
 taru, 109*b*
 -taut, *v.* -dant, 124
 taw, 114*b*
 tawel, *v.* taguel, 114*b*
 tei, *pl.*, *v.* ty, 112*a*
 teml, 106*b*
 temperam, 106*b*
 teneu, 112*b*
 testion, 106*b*
 testu, 106*b*
 tewi, 114*b*
 tigern, 112*b*

torch, 106*b*
 torth, 106*b*
 traeth, 106*b*
 tribedd, 106*b*
 trintaut, 106*b*
 trist, 106*b*
 tristau, 106*b*
 tristit, tristyt, tristwch, 106*b*
 truch, 106*b*
 trus, *v.* dros, 109*b*
 turwf, *v.* twryf, 106*b*
 twr, *v.* tyreu, 106*b*
 twrneimeint, 106*b*
 twryf, twrwf, 107*b*
 ty, *v.* *pl.*, tei, 112*a*
 tynnu, 106*b*
 tyreu, tyroed, *pl.*, *v.* twr, 106*b*
 tywyll, 112*b*

ucher, 112*b*
 ufern, uffern, 103*a*
 uyeu, *pl.*, 112*b*

* vira, 112*b*

wyf, 123

y, 108*b*
 yd, *v.* ed, 121, 130, 131
 ychen, *pl.*, 118*a*
 ymun, 102*b*
 ynyd, 103*a*
 yny (yny priawt person), 116*a*
 ynys, 108*b*
 yscawl, *v.* *pl.*, ysgolyon, 105*b*
 yscolheic, *v.* escoleicyon, 105*b*
 yscoleigyon, *pl.*, *v.* escoleicyon, 105*b*
 yscynnu, 105*b*
 ysgolyon, *pl.*, *v.* yscawl, 105*b*
 ysgymunn, 102*a*
 yskumunetic, 102*a*
 ysl(e)ipanu, 115
 ysmwg, 115
 ysuoden, 118*b*
 ysp, 102*b*
 yspeilaw, 106*a*
 yspeit, 106*a*
 yspwys, 106*a*
 ystabyl, 106*a*
 ystauell, 106*a*
 ystandard, 106*a*
 ystrat, *v.* strat, 106*a*
 yswein, *pl.* ysweinieit, 115

Kymric.

ad-, *v.* at-, 113*a*, 120
all, 109*a*
at-, *v.* ad-, 113*a*

bran, 119*a*

caer, cair, 108*a*
* cardaut, 100*a*
cat, 117*b*
cav (*i.e.* cabh), 114*a*
cavael, 123
ci, 110*a*
corf, 108*a*
corn, 114*a*

dant, 110*a*
do, dy, di, y, 115*b*, 120
dyn, den, 122

ech, 122
ep, 110*b*
-es, 124
csel, 113*a*

* garan, 113*a*
gavar, 123
guid, 119*a*
guin, 107*a*
* guint, 114*b*
gwnathod, 128
gwybydy, 128

hep, heb, 109*a*
hen, 112*a*
hi, 126

lavar, 118*b*
lin, 103*a*

mam, 111*a*
march, 118*a*
melin, 103*b*
mil, 103*b*
moilin, *v.* muilin, 119*b*
mor, 111*b*
mulin, *v.* moilin, 119*b*

nef, 119*a*
nerth, 108*a*
nos, 111*b*

oll, 118*b*

pimp, 122

rin, 118*b*

tan, 119
tat, 109*b*

-taut, 100*a*
tir, 109*b*
troit, 113*a*
trui, 118*b*
tut, 112*b*

uchell, 118*a*
un, 111*b*

y, *v.* do, 115*b*
yd, 121, 131

Cornish.

abat, 99*a*
abestely, *pl. v.*, apostol, 99*a*
affauar, *v.* mab, 118*b*, 124
ail, *v.* eyll, el, 99*a*
als, 99*a*
altor, 99*a*
anauhel, 107*b*
ancar (ancora), 99*a*
ancar (anachoreta), 99*a*
anow, *v.* (h)anow, 107*a*
apostol, *v.* abestely, 99*a*,
114
archescop, 102*a*
argans, arghans, 99*b*
arvow, 99*b*
ascient, *v.* guan, 105*b*
asen, 99*b*
auain, 102*b*
auallen, 115*a*
auhel, 107*b*
auon, 107*b*
avel, 109*a*
avell, 115*a*

barf, baref, 99*b*
bat, 100*a*
batales, 100*a*
bathor, 100*a*
bay, 100*a*
bedeven, 108*a*
benen, benyn, *pl.* beney-
nas, 109*b*
benegis, 100*a*
benenrid, 109*b*
benenuat, 109*b*
ber, 107*b*
bethaff, 112
beu, 109*b*
bewe, 109*b*
bewnas, bewnans, 109*b*
biu, 109*b*
blamye, 100*a*
blodon, 117*a*
boch, 117*a*
bom, *v.* bum, 113*b*
box, 100*a*

brag, 100*a*
braud, *v.* broder, 109*b*
brech, 100*a*, 108*a*
broche, 100*a*
broder, *v.* braud, 109*b*
buch, 108*a*
bugel, 108*a*
bum, *v.* bom, 113*b*
barges, 113*b*

caltor, 100*a*
cam, 110*a*
camhinsic, 110*a*, 118*b*
can, 108*a*
cancher, 100*a*
caue, 108*a*
canores, 108*a*
cantuil, 100*a*
cantulbren, 100*a*
carogos, 109*a*
caruu, 108*a*
caul, 100*b*
caws, *v.* cos, 100*b*
ceroin, 100*b*
chefuidoc, 116*a*
cheniat, 108*a*
clauster, *v.* cloister, 100*b*
clear, 100*b*
clethe, 108*a*
cloch, 100*b*
cloireg, 100*b*
cloister, *v.* clauster, 100*b*
cober, 101*b*
coir, 100*b*
colom, 100*b*
colter, 101*b*
collel, 101*b*
colviden, 101*a*, 119*a*
comfortye, 101*a*
commisc, 111*b*
corden, *v.* kerdyn, 100*b*
cos, *v.* caws, 100*b*
cothe, 108*a*
creador, 101*a*
cref, *v.* cryff, 117*b*
croadur, 101*a*
crogen, 115*a*
croider, 108*a*
crois, crows, 101*a*
cruit, 108*a*
cryff, *v.* cref, 117*b*
cugol, 101*a*
cuic, 113*b*
curun, 101*a*
cussin, 117*b*
cusul, cussyl, cusyl, cusill,
101*a*
cuthe, 110*a*
dagrow, 110*a*

dampnye, 101*b*
 dampnys, 101*b*
 dans, 110*a*
 dar, *v.* deri, 110*a*
 darat, 110*b*
 deserya, 101*b*
 det, 110*a*
 deth, *v.* dyth, 110*a*
 dethiow, *pl.*, *v.* deth, dyth,
 110*a*
 dew (dew sull), *v.* sull,
 101*b*
 dewolow, *pl.*, *v.* dywolow,
 101*b*
 deyow, 101*b*
 diagon, 101*b*
 diffenor, 101*b*
 discebel, *v.* dyscyplys,
 dyscyblon, 101*b*
 discomfortys, 101*a*
 diskient, 105*b*
 diskynna, 101*b*
 disliu, 114*a*
 doyn, 112
 drain, *pl.* drein, 115*b*
 dreyn, *pl.* *v.* drain, 115*b*
 dris, drys, 109*b*
 droeger, 114*b*
 droegeriit, 114*b*
 drochoberor, 104*a*, 114*b*
 drok, 114*b*
 dug, 110*a*
 dyghow, 110*a*
 dyscyblon, *pl.*, *v.* dis-
 cyplys
 dyscyplys, *pl.*, *v.* discebel,
 101*a*
 dyskas, 101*b*
 dysky, 101*b*
 dyspyth, 101*b*
 dyth, *v.* deth, 110*a*
 dywalow, *pl.*, *v.* dewolow,
 101*b*

eddreck, 116*a*
 edrege, 116*a*
 eglos, 101*b*
 ehoc, 102*a*
 el, *v.* ail, eyll, 99*a*
 elerhc, 107*a*
 elin, 110*b*
 emperiz, *fem.* 102*b*
 emperur, 102*b*
 encois, 103*a*
 enef, 107*a*
 er, 115*b*
 ereu, 107*a*
 ermit, 102*a*
 erv, 107*a*
 escop, 102*a*

estren, 104*a*
 eunhiusic, 118*b*
 eur, *v.* owr, 99*b*
 eyll, *v.* ail, el, 99*a*
 fadic, 102*b*
 falhun, 102*a*
 fall, 102*a*
 fallens, 102*a*
 fellet, *v.* guin-fellet, 102*a*
 fenester, 102*a*
 fenochel, 102*a*
 feth, *v.* fyth, 102*a*
 ficbren, 102*a*
 finweth, 102*a*
 fiol, 104*b*
 firmament, 102*a*
 flair, 102*b*
 flam, 102*a*
 fo, 102*b*
 fodic, 102*a*
 fol, foll, 202*a*
 forn, 102*b*
 frot, 111*b*
 funten, *v.* fynten, 102*a*
 fur, 102*b*
 furf, 102*a*
 fyll, 102*a*
 fynten, fynteon, *v.* funten,
 102*a*
 fyth, *v.* feth, 102*a*

galloff, 119*a*
 garthou, 117*b*
 gauar, 114*a*
 geaweil, 102*a*
 genys, 110*b*
 ghel, 117*b*
 gluan, 112*b*
 golhy, 119*b*
 gorthye, 116*b*
 gotheff, 110*a*
 gothevell, 110*a*
 govynny, 111*a*
 goyf, 110*b*
 goyn, 106*b*
 graf, *v.* gwraff, 110*b*
 gras, 102*b*
 grat, 102*b*
 grauior, 115*a*
 grevye, 102*b*
 grou, 117*b*
 guan (guan ascient), 105*b*
 guedeu, 107*a*, 112*b*
 guein, 106*b*
 guenoinreiat, 106*b*
 * guid, 115*b*
 guil, 106*b*, 118*b*
 guill, 119*b*
 guilter, 107

guinfellet, 102*a*
 guins, 114*b*
 guir, *v.* gwyr, 106*b*
 guirt, 109*b*
 guistel, 117*b*
 guit, 115*b*
 gulat, 116*b*
 gur, *v.* priot, 112*b*, 116*a*
 gurah, 108*b*
 gurthuper, 112*b*
 gustle, 117*b*
 gwerthe, 116*b*
 gwesper, 112*b*
 gwlas, 116*b*
 gwraff, *v.* graf, 110*b*
 gwyls, 119*b*
 gwyns, 114*b*
 gwyr, *v.* guir, 106*b*

haf, 118*b*
 haloin, halein, 111*b*
 hanaf, 102*b*
 (h) anow, *v.* anow, 107*a*
 heligen, 109*a*
 hering, 114
 heul, *v.* houl, 112*a*
 hiuen, 118*a*
 hoch, 118*a*
 hoirn, 118*a*
 hos, 117*b*
 hot, 114
 houl, *v.* heul, 112*a*
 huir, *v.* piur, 112*a*
 huis, 109*a*
 hun, 111*b*
 huuel, 102*b*
 huueldot, 102*b*
 hveger, 111*b*
 hvigeren, 111*b*

ieu, 111*a*
 incoislester, 103*a*
 intre, *v.* yntre, 108*b*
 iouenc, *v.* jouonc, 110*b*
 iskel, 103*a*

jouonc, *v.* iouenc, 110*b*

kalagueli, 100*a*
 kat, 100*b*
 keghin, 101*a*
 kelegel, 100*a*
 kemeskis, kemyskis, 111*b*
 kerdyn, *pl.* 100*b*
 kigel, 101*a*
 kinethel, 110*b*
 kog, 101*a*
 kyniaf, 110*b*

lad, 103*a*

lader, ladar; <i>pl.</i> ladron,	oberor, 104a	rethyskas, 130
laddron, 103a	ogas, 109a	rewerthys, 130
lagat, 118a	oin, 109b, 111b	rewresse, 130
lagas, 118a	oleu, 104a	roche, 114
lait, 108b	oleubren, 104a	rud, 111b
lear, <i>v.</i> ler, 118a	oliphans, 102a	ruid, 105b
legest, 103a	or, 102b	ruif, 105b
leic, 103a	ors, 106b	rute, 105b
len, <i>v.</i> leun, 111a	owr, 99b	ruy, 114a
ler, <i>v.</i> lear, 118a	oys, 109a	
leu, 103a		sach, 105b
leun, <i>v.</i> len, 111a	padelhoern, 104b	saw, 105b
lilie, 103a	palf, 104a, 111b	sawye, 105b
litheren, 103a	parchemin, 104b	scauel, 105b
liuer, <i>v.</i> luffrow, 103a	parth, 104a	scod, 113b
liuor, 114a	paun, 104b	scol, 105b
logel, 103a	peber, 101a	scolheic, 105b
lor, 118a	penakyll, 104b	screfe, 105b
loven, 118a	perbren, 104b	seriuen, 105b
luffrow, <i>pl.</i> , <i>v.</i> lieur, 103a	pesadow, <i>pl.</i> , 104b	scriiniat, 105b
lugarn, 103a	pesy, 104b	scriuit, 105b
lyw, 114a	peynys, 104b	scudel, scudell, 105b
	pinbren, 104b	seithum, 105b
mab, <i>v.</i> aflauar, 118b	pirgin, 104b	sened, 106a
mair, 103a	pisc, 104b, 114a	seth, 108b
maister, 103a	piscadur, 104b	settyas, 112a
malou, 103a	piur, <i>v.</i> huir, 112a	setva, 112a
manach, 103b	plentye, 104b	sibuit, 105b
manaes, 103b	plufoc, 104b	sicer, 106a
mans, 103b	plui, 104b	skentyll, <i>v.</i> skyntyll, 105b
mantel, 103b	pluen, 104b	skientoc, 105b
marth, 103b	pobel, pobyll, <i>v.</i> popel,	skyntyll, 105b
medhec, 103b	105a	snod, 118b
medhecnaid, 103b	pol, 104a	snoden, 118b
mel, 108b	pons, 105a	soler, 106a
menistror, 103b	popei, 101a	sols, 106a
menit, meneth, 108b	popel, <i>v.</i> pobel, pobyll,	spirit, 106a
menough, 116a	105a	steuel, 106a
meras, 103b	porchel, 105a	stol, 106a
mesclen, 114	porth, 105a	strail, 106a
mester, <i>v.</i> maister, 103a	porthas, 105a	strailelester, 106a
metin, 108b	porthow, 105a	streil, 106a
milin, 119b	poruit, 104a	strek, 115
minfel, 103b	pow, 104a	strekis, 115
mis, 111a	powesough, 104b	streye, 115
modereb, 111a	poys, 104b	strifor, 115
mols, 103b	praysys, 105a	streing, 114
moroin, 119b	prefis, previs, 105a	stryff, 115
moyrbren, 103b	prif, 110a	suif, 105b
muis, 103b	prins, pryns, 105a	sull (dew sull), 101b
mynny, 111a	princis, <i>pl.</i> <i>v.</i> prins, 105a	sur, 105b
	priot (gur priot), <i>v.</i> gur,	
nader, 114a	116a	talgel, 100b
neid, 114a	profuit, 105a	tarrow, 109b
nevor, 104a	profusy, <i>pl.</i> <i>v.</i> profuit, 105a	taw, 114b
noi, 114a	pronteryon, <i>pl.</i> <i>v.</i> pro-	tempel, 106b
noit, 114a	under, 105a	temptye, 116b
noyth, 116a	prounder, 105a	tenewen, 112b
		tensons, 106b
ober, 104a	redior, 114	termyn, 106b

tevolgow, *v.* tivulgow, 312*b*
 the, 108*b*
 ti, 112*a*
 tist, 106*b*
 tistuin, 106*b*
 tivulgow, *v.* tevolgow, 112*b*
 tonnel, 106*b*
 trait, 106*b*
 treason, 106*b*
 trech, 106*b*
 trest, 106*b*
 tribet, 106*b*
 trud, 106*b*
 tur, 106*b*
 tustunny, 106*b*

ugh, 118*a*
 unicorn, 106*b*
 untye, 106*b*
 uy, 112*b*

vertu, 107*b*
 vuludoc, 116*b*

 y-, 131
 yd, 108*b*, 121
 yffarn, yfforn, 103*a*
 yntre, *v.* intre, 108*b*
 yonk, 1'0*b*
 yorch, 108*b*

Armoric.

ael, *v.* el, hel, 99*a*
 ampeig, 102*b*
 aneualet, 99*a*
 apostol, 99*a*, 114
 appetaff, 104*b*
 applicquet, *v.* em, 99*a*
 archescob, 102*a*
 argant, 99*b*
 aour, 99*b*
 auber, *v.* ober, 104*a*
 auel, 107*b*
 auiel, 102*a*

badez, 99*b*
 ben(n)iguet, 100*a*
 bennoez, 100*a*
 beo, 109*b*
 beuaf, 109*b*
 bezaff, 112
 bizif, 112
 brech, 108*a*
 breuder, *pl.*, 109*b*
 bud, 117*a*
 buez, buhez, 109*b*

cador, 100*b*
 cam, 110*a*
 christen, 100*b*
 clezef, 108*a*
 cloarec, 100*b*
 coar, 100*b*
 coffes, 101*a*
 coma(e)zreset, 101*a*
 comance, 101*a*
 compizrien, 101*a*
 concedis, 101*a*
 coulme, 100*b*
 craf, 117*b*
 cref, creff, 117*b*
 cridif, 108*a*
 criff, 117*b*
 croeadur, 101*a*
 croer, crouer, 101*a*
 cruel, 101*a*
 cusul, 101*a*
 cuzet, 110*a*

dafnet, daffnet, 101*b*
 daffny, 101*b*
 decedy, 101*b*
 derch, 113*a*
 deiz *v.* diziou, 110*a*
 despez, 101*b*
 desquebl, 101*b*
 -dêt, 124
 di, 108*b*
 diaoul, 101*b*
 difen, 101*b*
 diner, 101*b*
 dimalice, *v.* dualice, 103*a*
 disguiblion, 101*b*
 disquennet, 101*b*
 disquif, 101*b*
 disprisonet, 105*a*
 dualice, *v.* dimalice, 103*a*
 diuiner, 101*b*
 diziou, *pl.*, *v.* deiz, 110*a*
 doan, 112
 doe, 110*a*
 doen, 112
 doetaf, 101*b*
 doetanc, 101*b*
 douet, 101*b*
 douetaf, 101*b*
 drein, *pl.*, 115*b*
 dreist, 109*b*

ed, 121
 el, *v.* ael, hel, 99*a*
 elin, 110*b*
 em (em em appliquet) 99*a*
 emtennet, 106*b*
 enef, 107*a*
 enes, 108*b*
 enterraf, 103*a*

entre, 108*b*
 esper, 106*a*
 estonaff, 102*a*
 euel, 109*a*
 euffrou, *pl. v.* oberou, auber, 104*a*
 ez, 131

 fale'houn, 102*a*
 fall, 102*a*
 feunteun, feunten, *pl.* feuntenyon, 102*a*
 fez, feiz, 102*a*
 finisaf, 102*a*
 finuez, 102*a*
 flierius, 102*b*
 foll, 102*a*
 forest, 102*a*
 fos, foss, 102*b*
 foultr, 102*b*
 fruez, 102*b*
 fur, 102*b*

gallaf, 119*a*
 ganet, 110*b*
 glin, 119*b*
 glisi, 117*b*
 gloan, 112*b*
 goestlas, 117*b*
 gouaff, 110*b*
 gousper, 112*b*
 gouzaf, gouzaff, 110*a*
 graf, *v.* groaf, 110*b*
 grif, *v.* groaff, 110*b*
 groaff, *v.* graf, gruiif, griff, 110*b*
 gruif, 110*b*
 guelchi, 119*b*
 guent, 114*b*
 guir, 106*b*

haff, 118*b*
 haiarn, *v.* hoiarn, 118*a*
 hanu, 107*a*
 hastomp, 102*b*
 hel, *v.* ael, el, 99*a*
 hent, 118*b*
 histren, 104*a*
 hoiarn, *v.* haiarn, 118*a*
 hun, 111*b*

iffam, 103*a*
 iustice, 103*a*

 kaoter, 100*a*
 kemmeski, 111*b*

lagat, 118*a*
 lann, 118*a*

lealtet, 103a	paradis, paradoes, 104a	rez, <i>v.</i> reiz, 114b
lech, 103a	parfetaff, 104b	roed, 105b
leiffriou, 103a	parz, <i>v.</i> perz, 104a	roen, 105b
len, leun, 111a	pechet, <i>pl.</i> pechedou, 104b	sacrileig, 105b
	peden, <i>pl.</i> pedennou, 104b	saludomp, 105b
manc, 103b	penedour, 104b	sant, 105b
manen, 103b	peoryen, <i>pl.</i> , 104b	sarmoner, 106a
martir, 103b	perz, <i>v.</i> parz, 104a	sceurt, 106a
maru, 111a	peuch, 104b	scler, 100b
maruail, 103b	pidif, pidiff, 104b	scoet-, scoit-, 109a
menaf, mennaf, <i>v.</i> minif, 111a	plen, 104b	sebeliaf, 105b
merch, 119b	pligadur, 104b	sent, <i>pl.</i> <i>v.</i> sant, 105b
mesfectouryen, 103b	ploeys, 104b	sin, 106a
mester, 103a	ploi, <i>v.</i> plue, plueu, 104b	soav, 105b
millic, 103a	plue, plueu, <i>v.</i> ploi, 104b	soingaf, 106a
minif, <i>v.</i> menaf, 111a	poan, <i>pl.</i> poanyou, 104b	soliter, 106a
ministren, 103b	pomell, 105a	soutenet, 106a
mir, 103b	porz, 105a	speret, 106a
miret, 103b	porzit, 105a	squient, 105b
miro, 103b	pou, 104a	stat, 106a
musur, 103b	pones, 104b	
	prelat, 105a	tardomp, 106a
nation, 104a	preservo, 105a	tempel, 106b
nezaff, 108b	prestis, 105a	teniff, 106b
nifer, <i>v.</i> niuer, 104a	prezec, 105a	test, 106b
niuer, <i>v.</i> nifer, 104a	priet, 116a	ti, <i>v.</i> ty, 112a
noaz, 116a	proffe, prouffe, 105a	trindet, 106b
noter, 104a	psaulter, 105a	tron, 106b
		ty, <i>v.</i> ti, 112a
obediant, 104a	querchat, querchit, 100b	
ober, <i>v.</i> auber, 104a		úasal, <i>gen.</i> <i>v.</i> us, 118a
oberau, <i>pl.</i> <i>v.</i> ober, 104a	ra-, 130	urz, 104a
oferen, <i>pl.</i> offerennou, 104a	recommant, 105b	us, 118a
ohen, 118a	reiz, <i>v.</i> rez, 114b	
ordren, 104a	renaff, 105b	vice, 107b
	rento, 105b	
	reol, 105b	yliis, 101b

CELTIC INDEX TO PHONOLOGY IN IRISH.

Gaulish and old Celtic.

ande-, 143
 are-, 139, 164
 arêmoricos, 165
 ate-, 139
 dumno-, 139
 ech, 139
 epo-, 139, 161
 Esu-nertus, 139
 κοροντρόπος, 150
 νεμητον, 139
 Nerto-marus, 139
 Octodurus, 139
 Orgetorix, 139
 ver-, 162, 163
 vergo-bretus, 139
 Vernemetis, 139

Irish.

[The Modern Irish words are printed in Italics, the Old and Middle Irish in Roman letters.]

a, á, 159
 a, 160
 abair, 137
 abás, 165
 aca, 141, 155
 acaldam, accaldam, acal-
 tam, 143, 144, 145
 acarthar, 147, 160
 accomallte, acomaltae, 147
 accursagad, 159
 achésta, 159
 ad-, 137
 adarc, 143
 adbeir, 137
 adcomaltar, 147
 adgládathar, note, 144
 adgladur, note, 144
 adharc, 143
 adhradh, gen. adhartha,
 143, 149
 adnuim, 145
 adrad, 143
 æcaillse, 139
 æcolsa, 139
 aedparthi, 135
 áes, 159
 agallam, 143, 145
 agnúm, 159
 aice, 141
 aichti, 147, 148
 aicnete, 149

aíd-, 139
 aídchuimthe, 147
 aige, 141
 aile, 140, 157
 ailiu, dat. masc., 157
 aimsear, 140
 aimsér, 140
 ainmm, 140, 142, note,
 142, 158
 ainm, 158
 ainm, 140, 142
 aír, 139, 165, 166
 air, 164
 air, note, 137
 aírchinn, 165
 Airdeasbog, 159
 aire, 165
 aírëch, 165
 airi, note 138, 165
 áirib, note 138
 aírilti, 147
 áiriam, note 138
 airiuibsi, note 138
 airiumm, 165
 aírriu, note 138, 141
 airthër, 165
 aiste, 141
 aith-, 137, 139
 aithdheanam, 150
 aithne, pl. aitheanta, 148
 aithtéidhte, 150
 alaile, 156
 alaíli, gen. masc., 157
 alaíliu, dat. 157
 Alba, 145
 Alban, gen. M.I. ; dat.
 Albain, 145
 Alpa, gen. Alpan, acc. Al-
 paí-ni, M. I., 145
 ambés, 159
 ambrotte, 149
 amires, 164
 amiressach, 164
 amprom, 162
 ammi, note 142
 an, 162
 an, 140
 a (n), 140
 an (n), 140
 añ, 159
 anaír, 140, 165
 anam, 142
 ananman, 159
 anasberthar, 147
 anasbiursa, 160
 andeaghaidh, 143
 an dorogbid, 137
 aingutas, 149
 anienda, 149
 animm, 142, note 142
 annaímm note 157
 annmambi, note 157
 annmammi, note 157
 annmanbi, 157 note
 anmande, 149
 anoir, 140
 ant, 140, 144
 aon, 140, 157, 158
 apair, M. I., 137
 apcetha, 159
 Apilogdo, gen., note 139
 apir, 137
 apredchimme, 160
 ar, 137, note 137, 166
 ar, 164, 165, 166
 ar', 165
 arañ, 165
 arb (root), 139
 archënn, 165
 archiünn, 165
 árd, 143, 146
 ardd, 143, 146
 argur, 165
 armbrethre, 159
 arloure-ni, 159
 aru, 159
 arna, 147
 arnaírb, 165
 arnét, 159
 arndiis, 159
 arnoib, 156
 arnoibbriáthraírb, 156
 aromfoimfea, 159
 arosaillether, 147
 arrocar, 160
 arsate, 149
 arse, 165
 arsid, gen. 149
 arsodaín, 160
 arsóire-ni, 159
 art, v. ardd, 146
 as, as, 165
 asagnintar, 147
 asenam, 159
 asind-, 165
 asrírther, 147
 asrulenta, 147
 ass, 165
 asta, 141
 ataímët, 145

- atbail, 144, 151
 atbeir, 137
 atdubelliub, 160
 athdóidhte, 150
 athir, 138, 163
 athscribend, 151
 aththaoiseach, 150
 Atilogdo, *gen. note*, 139
 atobci, 160
 atobsegatsi, 160
 atomaig, 144
 aúð-, 141
 auð, 141
 augtortás, 141, 145
 aúr-, 141
 aúrgabtha, 147

ba, 161
 baile, pl. *bailte*, 148
 baill, 139
 baindea, M. I., 151
 baintigerna, M. I., 151
 baistim, 138
 baitsimm, 138
 banda, 149
 bandachlach, 151
 bandálem, 151
 bandea, 151, 159
 bandechuín, 151
 banscala, 151
 bantóismid, 151
 bárd, 154
 barn, *v. farn*, 159
 baúll, 139
 baúllu, 139
 beag, 145
 béarla, *v. beurla*, 138
 bec, becc, 145
 beirim, 137
 béisti, 135
 béire, 138
 bendachad, 143
 bendacht, 143
 benachadh, M. I., 143
 bennacht, M. I., 143
 beos, 142
 ber (*root*) = Skr. *brû*, 137
 bérli, 138
 berrthaíð, 150
 berthir, 147
 bessti, bésti, *v. beisti*, 135
 bétha, 139
 bétho, *gen. sing.*, 139
 beurla, 138
 bheirim, 137
 bheos, 142
 biad, *gen. biith*, biid, 139
 biasta, M. I., 135
 biast, M. I., 135
 biddixnugud, 151

bídh, 139
 bindd, bind, 143, 146
 binn, 143, 146
 bithgaírdi, 149
 boíll, 139
 bolad, 149
 bolgg, bolc, 143, 146
 bolg, 143, 146
 boltigetar, 149
 borb, 143, 146
 borp, 143
 bráge, 143
 bràgha, 143
 breac, *gen. bric*, 145
 *brecc, 145
 breth, 139
 briathraib, *v. arnóibbriath-*
 raib, 156
 brithēm, 142
 bró, pl. *bróinte*, 148
 buídh, 161
 brüde, 143
 buidhe, 143
 búllu, 139
 burbē, 146
 burpē, 146

 cách, 137, 156, 157, 161
 caích, *gen. v. cach*, 157, 159
 caíll, 140
 cailleach, 140, 143
 caillēch, *gen. caillighe*,
 140, 143
 cáin, 140
 caíndlóir, 143
 cáinduthracht, 151
 caingnim, 157
 cainscéil, 151
 caintaídlēch, 151
 cáinteist, 151
 cáintoimtiu, 151
 cáintöl, 151
 caisc, 161
 caira, 140
 caírigthir, 147
 caoga, 140
 caoim, 140
 caol, 140
 caora, 140
 carbad, 135, 145
 carbat, *v. carput*, 135
 carpat, M. I., 135, 145
 capuíl, 154
 carput, 135
 cathrur, 157
 céad, 145, 158
 cáingna, 143, 145
 ceann, 159
 cech, 156, 157, 159
 ceithre, 158

 cen, 137
 cenalpande, 145, 149
 cene, 142
 cenéuil, *gen.*, 157
 cenélu, cencoll, cenéolu,
 ceníul, ceneóil, dat.,
 157, 159
 cēnn, cenn, 139, 150, 161
 cenodfil, 159
 centat, 150
 ceól, pl. *céolta*, 148
 césad, céasath, *gen. césta*,
 césto, 148, 159
 cessaí, *dat.*, 159
 cét, 145
 cethargaraí, 149
 cethir, 161
 cethirchét, 158
 cétnē, 145, 156, 162
 cétni, 157
Chaisil, 159
cheana, 142
 chenélaí, 157
 chésta, chésto, 158
 chétbutho, *dat.*, 159
 chétni, *dat. neut.*, 157
 chétnai, *gen.*, 157
 chétnídiu, *dat.*, 157
chlann, decl., 155
 chli, *dat.*, 157
chluis, *dat. chluais*, 158
 chollno, 158
 chólníde, 157
 chos, 159
 clirann, 157
chrann, 158
cluca, acc. pl. 139, 141
chugam, 139, 142
chuice, 141
chuige, 141
 chumachtig, 160
 cia, 137
 ciàl, 158, 159
 cib é, cip é, 137
 cinnífil, 160
 cinníud, 149
 claar, *dat.* 159
 claidēb, 142
claidheim, 142
 clainne, 140
 cland, 143, 161
clann, 143
 clocc, 145
clog, 145
cloinne, 140
cluain, *pp. cluainte*, 148
cnoc, 145
 cnoce, 145
 co (ad, cum) 137, 142
 co (donec, ut) 137

coaga, 140
coatomsnassar, 159
cocarti, 147
codhladh, codladh, 143, 145
cogadh, pl. *cogtha*, 149
cofordumthésid-se, 159
cóic, 140, 161, note 161
cóica, 140
cóil, 140
coill, pl. *coillte*, 140, 148
coin-, 150
coimeal, 143
colann, 140
colinn, 140
colna, 143
com', 165
comalnad, note 144, 163
comalnadar, 163
comalnamar, 163
comallnithe, 163
comchésad, 165
comchlante, 147
coñ, 160, 165
con-, *coin-*, 150
conde, 149
condibfeil, 160
condigénte, 147
condiuiti, 165
condumfel, 159
confesta, 147
conintorgáitar, 147, 160
connarcas, 143
connáruchretesi, 147
conrochretesi, 147
consaín, acc., 157
conucbad, 144
conulintae, 147
cóosnada, 165
corcur, 161
Cormac, note, 142
coro, 137
corp, 145, 157
Corpimaqvas, note, 142
coš, 165
cosa, pl. 159
coséitchi, 165
cosmil, 165
cosnadh, gen. *cosanta*, 148, 149
cot-, 144
cotaocbat, *cotaucbat*, 136
cotlad, dat. *cotlud*, 145
cotobsechfidher, 160
cotondelefam, 144
crann, 161
creidim, 145
creitfess, acc. 157
cren, 161
cretim, 145

creitme, 159
cridé, 143
cridi, dat., 159
cröch, 139
cröchad, gen. *cröchtho*, 139, 148
crochtha, note 148
crochthe, 148
croidhe, 143
crot, 145
cruit, 145
cruithnechta, 159
cu, pl. *cointe*, 148, 149
cuc', 165
cucci, 165
cuccu, acc. pl., 139
cuccumm, 139
cúig, 140, 158
cuingeis, 161
cumactib, 165
cundrad, 143
cundradh, M. I., 143
cunradh, gen. *cunnartha*, 143, 149
cúrsagad, gen. *cúrsagtha*, 148
cutscitchi, 159
dá, 138, 158
dagimrat, note 148
dag- *imráta*, *drog-imráto*, 148
dall-ciach, 150
dam, 142, note 143
damnae, note 136
dañ, 158
dánigüd, gen. *dánigthëa*, 148
daonna, 149
daóradh, gen. *daórtha*, 149
darc, (root) (=Gr. *δερκω*), 143
de, 153, 155, 156
dealbh, 143
déanadh, gen. *déanta*, 148, 149
dearbh, note 143, note 145
debthach, 150
debuith, dat. pl. *debthib*, 148
dechrugud, dat., 159
deich, 158
deirim, 137
déntí, 147
dephtigim, 150
derbb, note 143
derbthaír, 147
desiu, 160
d'faghbaíl, *d'jághbáil*, 136
d'fearthain, 150

dí, 141, 158, 159
dià, gen. *deí*, *dé*, 139, 152
dian, 138
dianaiper, 137
dianeprem, 137
dicheannaim, note 150
diltúth, 150
díguttai, dat., 157
díngutai, dat., 157
dintecnatatu, dat., 153
díntrediu, dat., 153
diobh, v. *dóibh*, 141, 155
diombuan, note, 150
diombuidheach, note, 150
diomolaim, 150
dionór, note, 150
diothoghluide, note, 150
dlútai, 147
do, 157, 158, 159
do-, 137, 159
do, 141, 153, 155, 156, 159
doair (d'air), 144
doáirci, 144
doairth, 135, 144
doathmne, note, 135
doan, 138
doairchanim, 165
doberrthe, 147
dobimchomartt, 147
dobiur, 137
dobtromma, 160
do-chantain, 150
dofius, v. *du-fius*, 160
dofoirde, 143
dogéntar, 147
dóibh, v. *diobh*, 141, 155
doilbthid, 150
doimín, 142
doimmfolung, 158
dóinde, 149
doinscannsom, 146, 151
dom-, 142, note, 143
** dömaín*, 142
dombersom, 137
domthoschid, 159
dömun, 139
don, 157
dond-, 158
donelltar, 147
dontorüd, dat., 153
doopir, 144
dorónta, 147
dorurgabtha, 147
doscéulaim, 151
dosenmáthar, 159
dosmibera, 160
dothabaírt, 159
dothóghbáil, 136
drogimráto, 148

- droíscéla, 151
 du-, 151
 dubhart, 137
 dubhras, 137
 dúfius, v. do-fíus, 160
 *dunad, 149
 dúnattae, 149
 Dúnpeleder, 151
 dús, dúus, 160

 é-, 146
 éa, éi-, 150
 eadoinín, 146
 éadtrom, 146
 éagcóir, 146
 eagna, 145
 éan, decl. 155
 eardhairc, v. urdhairc, note 150
 eas-, 150
 easbha, gen. pl. *easbhadh*, note 143, note 145
 easbog, 138
 easpog, M.I., 138
 eatorra, 141
 ecb, 139, 161
 écintech, 149
 eclustai, 147
 écne, 144, 145
 écéir, 146
 éd- 139
 édpairt, v. idpairt, 144
 éi-,
 eiblim, 145
 eidir, 141, 145
 eile, 140
 eiscsende, 149
 eísséirgi, gen. 159
 éistim, 138
 éitsimm, 138
 én, 164
 epeir,
 epert, 148
 eperthe, 147
 eperthi, 147
 epertith, 149
 épil, 144
 epir, epiur, epur, 137
 *éplímm, 145
 epscop, 138
 ér-, 139, 164
 érbaíð, 139
 érbíð, 139
 érchoillid, 148
 erend (tír-n-erend), 159
 erriu, erru, note, 138
 erunn, note 138
 erutsu, note 138
 es-, 146
 esartaíð, 149
 ësib, 165
 ètal, 139
 ètar, 145
 ètarru, 141
 ètarscarad, gen. ètarscar-
 tha, 148
 ètha, 139
 etrum, 146

 fácab, 136
 fad, 145
 fág, 136, 137
 fagbas, fagbus, 136
 fagebtis, 136
 fagh, 136, 137
 faghaim, 136, 137
 faghbáil
 faghbait, faghbat, M. I., 136
 faghbháil,
 fair, note, 137
 falt, 145
 farclúu, 159
 fardiúll, dat. 157
 farn, v. barn, 159
 farnintliucht, 159
 fealsam
 féar, 140
 fear, 140, decl. 155
 feara, voc. pl. v. féar, 157
 fearaibh, dat. v. féar, 154
 feardha, 149
 fearg, 143, 146
 féarr, 140
 fealsam, 142
 félsab, 139, 142
 fér, 140
 fér, 140
 ferc, 143, 146
 ferce, dat., 159
 ferr, 140
 fescor, fescar, 161
 fiché, gen. fichét, 158, note 158
 fiche, gen. fichead, nom. fichid, 158
 fíntan, 151
 fir, nom. pl. v. féar, 157
 fíréanta, 149
 fo-, 137, 162
 foáibat, 136
 fochun, dat. masc. 157
 fodlaídi, dat., 157
 fogbaidetu, 136
 foghébhá, 136
 foghlaim, 143
 foglaím, 143
 fogoir, dat. 157
 foilsigüð, 148
 fointreb, 151
 foir, note 137, 163
 foirbthe, 163
 foircheann, 163
 foirethe, 147, note 147
 foirib, note 137
 foisite, v. liofoisite, dat. 159
 folnibthe, 147
 fomám, dat. 159
 fomchridichfidher-sa, 159
 fomfífidersa, 159
 fonsegar, 160
 for, 137, note 137, 157, 160, 162, 163, 166
 foracab, 136
 foraib, forib, note 137
 forbanda, 147
 forcanim, 163
 forcanti, 147
 forcenn, 163
 forcetal, 163
 forchain, 163
 forchanim, 163
 forchongair, forcongair, 163
 forchongrim, forcongrim, 163
 forchun, 163
 forcongur, 163
 fordomchomáther, 159
 fordubcechna, 160
 form, formm, note 137
 forndobcanar, 160
 forngarti, 147, 148
 forraind, note 138
 forrn, fornn, note 137
 forru, note 137, 141
 forserce, 159
 fort, note 137
 forthéit, fortéit, 163, 165
 fós, 142
 fosmachtu, 146
 fosodín, 160
 fót, 145
 fotrácbussa, 136
 freadaírc, 143
 frendaírc, dat., 157
 frecre, 144
 fri, 137, 160, 162
 fricach, 165
 friis, 165
 fris, 165
 frisbiur, 165
 frisdúntar, 147
 frislond, acc., 168
 friss, frissin-, 165
 fristacuirther, 147
 frit-, fritt-, 151
 fritammiurat, 144

frith', 162, 165
 frithaidechtæ, 151
 frithcheist, 165
 frithtasgat, 151
 fritumthiagar, 159
 fudómaín, fudumaín, 142
 fuil, *dat.*, 158
 fuil, 159
 fuiri, *note* 137
 fuirib, *note* 137
 fúithe, 141
 furastar, 147
 furib, *note* 137
 furnn, *note* 137
 fúthu, 141

gá, 137
 gab, (*root* "capere"), 136
 gabaíl, 140
 gabar, 162
 gabál, 162
 gabháil, 140
 gabhaim, 137
 gabimm-se, 137
 gach, 137
 gaith, gáid, 140
 gallda, 149
 gan, 137, 154, 155
 gaoth, 140
 gentar, 147
 génthir, 147, 148
 gheibhim, 137
 gibe, 137
 go (to, with), 137
 go (that), 137
 go-n-aibrain, 137
 grianda, 149
 griantaírissem, 151
 guídmise, 152
 gur, 137
 gutte, gutae, 149

hícc, 158
 hiciar, *v.* claar, 159
 hifoísíte, *v.* foísíte, 159
 hipersonaib, *v.* persin, 156
 hirés, 159
 hisintórunn, *dat.*, 153
 hitogarmim *v.* togarmim
 hitosüg, *dat.*, 158
 hontecatatu, *dat.*, 153
 honuntogaitarni, 147, 160
 hóthoil, 165
 huándlúthi, *dat.*, 157
 huáthati, *acc. pl. fem. v.*
 uathath, 149
 huátigitir, 149

iar, 157, 162

iarfaichthéo, iarfaigtho,
dat. pl., iarfaigthib, 148
 iarfaigíd, iarfigíd, 148, 165
 iarma, 165
 iarmbaíthiús, 165
 iarmaíoch, 165
 iarm(s)uidigthe, 165
 iarn, 160, 165
 iarsintaírgiriu, *dat.*, 153
 iartimnu, 165
 iasg, 163
 icachthir, *dat. neut.*, 157
 id-, 139
 idir, 154, 155
 idpart, *v.* édpart, 144
 idpart, 135, 145
 idpart, 151
 il, 163
 ilar, 163
 ildáni, 151
 ilde, 163
 illestur, 159
 iltoimddén, 151
 im, 142
 imbed, 143
 imbrádud, imrádud, 148
 imbráti, imráti, *nom. pl.*,
acc. imrátiú, 148
 imcabthi, 147
 imcasti, 147
 imchuimriüg, 159
 imdhiden, *note*, 150
 imdibthe, 147, *note*, 147
 imm, 140, 142, *note*, 142
 immfolung, *dat. v. do im.*
 158
 immidforling, 159
 immumforling, 159
 imrádud, *v.* imbrádud, 148
 imrátiú, *acc. v.* imbrati,
 148
 in', 165
 in, 140, 165
 in, 140, 157, 160, 162
 in-, 140, 160
 inchamthuisil, 157
 incholnigúd, *gen.* inchol-
 níchtho, incholnigthea
 148
 inchosc, *note*, 151, 165
 inchruinn, *gen.*, 157
 inchuimriüg, 159
 incomscribúdaith, 151
 ind, 140
 ind', 165
 ind-, 143, 153, 155
 indaéchoilteá, *gen. v.*
 échoilíud, 148
 inlala, 156

indegaíd-i, 143
 indfoilsígthe, 148
 indfolaid, *gen.*, 157
 indidultaigae, 150
 indiumm, 143, 165
 indtogas, 153
 indtuigther, 147
 induini, 153
 inghean, 159
 ingiün, 165
 ingor, 143
 ingrentíd, 149
 inn-, 155
 inna, 157
 innte, 141
 inse, 160
 insenduine, *gen.* intsen-
 duini, 153
 insin, 153, 160
 inso, 153
 inspiro, *gen.* 153
 int, 140, 144
 int-, 144, 153, 155
 intaídlich, *gen.* 153
 intairnchrutto, *gen.* 153
 intesa, *gen.* 153
 intinnscana, 146
 intisiu, 160
 intíthall, 160
 intiu, 141
 inté, 141
 intioichther, 147
 intonnaigim, 151
 intsamail, 144
 intsamuil, 146
 intsechtaigtha, 148
 intsílicht, 144, 146
 intuisil, *nom. masc. pl.* 153
 intursitib, 151
 iodhbairt, 145
 iomad, 143
 ion-, 140
 ionam, 143
 iongnadh, *gen.* ionganta,
 148
 ionnta, 141
 ír-, 139, 164
 írchoilítih, 149
 írchoilíud, 149
 ire, 164
 ireiu, 164
 is, 153, 156
 isin, 156
 isindanmaim, 157
 isindepistil, *dat. fem.* 157
 isinóinchorp, *dat. masc.*
 157
 isintuisciulsin, *dat.* 153
 isintuacihli, *dat.* 153

isóiri, *dat.* 159
 issintodochidui, *dat.* 153
 itarscarthar, 147
 itchethir, *nom. pl.* 157
 itchóimthecht, 159
 ith-, 139
 ithim, 162
 itossúch, 165
 itsenmáthir, 159

la, 160
 láim, *dat.* 157
 lán, *note* 144, 163
 lanad, 163
 láne, 163
 láni, *dat.* 159
 laur, lour, 163
 lethan, 163
 léine, *pl. léinte*, 141
 l'a, 163
 linad, 163,
 linn, *pl. linnte*, 148
 lintidi, 149
 lobrígthir, 147
 loiscthe, 147
 löth, 139

mac, 145, 151, 159
 macc, 145, 161
 macthire, 150
 mactire, 150, 151
 maer, *M. I.*, 140
 maini, *pl.*, 140
 mainistrech, *M. I.*, 139
 maith, 140
 maldacht, 143
 mallacht, 143
 maniréltar, 147
 manudubfeil, 160
 maoin, 140
 maor, 140
 mara, *M. I.*, 139
 marbh, 143
 marc, 145
 marufeste, marrufeste,
 147
 medóntaírismid, 151
 méite, *gen. fem.*, 157
 messe, 160
 mi-, 151
 miástar, 147
 mile, 158
 mili, 158
 místae, 149
 mo, 157, 159
 mo, 159
 mochland, 159
 möga, 139
 móin, *pl. móinte*, 148
 monístre, 139

móra, 139
 mora, 157
 mordha, 149
 mothol, 159
 muid, 159
 muintir, muintear, 145
 muntar, 150
 muntir, *dat.*, 159
 múntíth, 149
 múnud, 149
 múr, *pl. múrtha*, 149

na, 155
 nach, 156, 161
 nachibfeil, 160
 nadipru, nadipro, 137
 na m-ball, 143
 nammall, 143
 naon, 142
 na ructhae, *v. ructhae*
 ndeaghaidh, 143
 néal, *pl. néalta*, 148
 neam, neim, 142
 neart, 145
 neb-, 142
 nebmabtu, nebmabtbath,
note 149
 nech, 140, 161
 necht, 161
 neim-, 142
 nemed, 139
 neoch, noch, 140
 nephiandatu, 157
 nert, 139
 nertad, *gen. nerta*, 148
 nērutsu, 152
 ní, 160
 níbhá, 160
 nidan, 160
 nífiástar, 147
 nígette, 147
 nilfolad, *acc.*, 158
 nimcharatsa, 159
 nimdibi, 158
 nímptha, 159
 nintha, 159
 ní, 160
 níafortéit-ni, 160
 nintá, 160
 niscartha, 147
 nisfetemmar, 160
 nísfítir, 160
 nistabur, 160
 nítenat, 160
 no, 160
 nobcarad, 160
 nobsóirfa-si, 160
 nocretim, 160
 nochrochte, 147

nodascara, 160
 noí, 158
 noib, 142
 nolintae, 147
 nomglantar, 147
 nomthachthar, 147, 148,
 159
 nonchretid-si, 160
 nondubcairim-se, 160
 nondobsommigētar, 160
 nondasoirfēa, 160
 nongabthe, 147
 nonlintarni, 147
 nonnertarni, 147
 nonsóirfēa, 160
 nopredchim-se, 160
 nosmoidet, 160
 nosúguid-som, 160
 nudamechrocha, 159
 nunsluinfemni, 160

o, 151, 159
 ó-, 157, 158, 165
 O'Briain, *gen. I. Bhriain*,
dat. d'ua Bhriain, 151
 ocht, 139, 158
 ocht, 135, 139
 od-, 137
 óen, 157, 158
 oēn, *v. oin*, 140, 141
 oena, 157
 óenchoimdiu, 157
 óenchorp, 157
 óenchrann, 157
 oile, *v. eile*, 140
 oin, 140
 óinaichtthir, 147
 oinchorp, 157
 olc, 145
 olódain, olódin, 160
 ón, 157
 óuach, 157
 ond, 159
 ondóentoisrinn, *dat.*, 157
 ontechtairiu, *dat.*, 153
 óntrédiu, *dat.*, 153
 orcaid, 139
 oreas, 139
 órdha, 149
 orm, *note* 137
 orra, *ortha*, 137, 141
 orraibh, *note* 137, 141
 orrainn, *note* 137, 138, 141
 ort, *note* 137
 ortha, 141
 ósuidi, *dat. fem. ólsuide*,
 160
 óthad, 139
 oua, *v. ua*, 141

- peccad, *gen.* pechtha, *decl.* 148, 157, 159, 162
 persan, 162
 persín, 156, 157, 159
 phersín, 157
 precept, 162
 prim, 162

 rad idé, 143
 raínn, 159
 ráncatar, *M. I.*, 145
 rángas, 145
 ré, 152, 164
 recach, 157, 165
 rechtáircid, 151
 rect, *dat.*, 159
 rélath, rélad, *gen.* rélto, 148
 rem, 142
 rem', 165
 remeperthe, 147
 remfoiti, 147
 remi, 140, 164, 165
 remib, 165
 remiepur, 165
 remthechtas, 165
 rén, 164
 reñ, 160, 165
 renaírite, 165
 ri, 137
 riágoil, *dat.* 157
 righdúinte, 149
 ro, 160, 163
 robcar-si, 160
 robclandad, 160
 roberthe, 147
 robfoithigéd, 160
 rodchúrsach, 159
 rofestar, 147
 roim, 142
 roim'si, 153
 roinne, 141
 roimpe, 140, 141, 153
 roimsi, 141
 rolaúmur, 139
 rolín, 163
 rolóinor, 139
 roimam, 140
 rompa, 141
 romsóirsa, 159
 rondasabset, 160
 rondobearsam-ni, 160
 rondpromsom, 159
 ronfítid-ni, 160
 ronsóir, 160
 ronsóir-ni, 160
 roscarsam, 151
 roscomal, 160
 rospredach, 160
 rostán, 151

 rotchechladar, 159
 ructhae, 147

 sa, 153, 160
 saíb, saeb, sóib, soeb, 140
 saíde, *nom. pl.* saídai, 160
 saigul, 140
 sain, *nom. pl.* saini, *dat.* sainib, 156
 san, 156
 salm, 162
 samaltir, 147
 saobh, 140
 saoghal, 140, 156
 saoghalta, 149
 sastai, 147
 scote, scotae, 149
 scoth, 149
 scribthar, 147
 *se, 141
 se, 153, 160
 sé, 158
 seacht, 158
 seanchus, 156
 seandúine, 156
 sech, 161
 sechim, 161
 sechitir, 161
 secht, 161
 sechtmaine, 161
 sechtáigúd, 148
 seim, *dat.*, 157
 sem, 160
 sendúine, 151
 sens, icach-, 157
 sentinni, 151
 seól, *pl.* seólta, 148
 serbe, *dat.* 159
 sgéal, *pl.* sgéalta, 148
 side, 160
 sin, 153, 160
 siu, *dat.*, 160
 *siu, 141
 slabrad, 149
 slabratae, 149
 sluíntir, 147
 so, 153, 160
 sodaín, 160
 sóib, *v.* saíb,
 som, 160
 soscéle, 151
 sósúth, *dat. masc.*, 157
 sráthatath, -tat, 150
 sráthath, 150
 sruth, *decl.* 155
 su, 141, 160
 suídighthir, 147
 súil, *decl.* 155, 159
 suín, 158
 sulbaírichthe, 147, 148

 sulbaírigúd, 148
 superlaít, 158

 tabaírt, 148
 tabhram, 137
 tabur, 137
 taid-, 135
 taidmenader, taidminedar, *note* 136
 táin, *pl.* táinte, 148
 taír-, 144
 táirci, 144
 *taírmchruthad, *gen.* taírmchrutto, 148, *note*, 148
 taírmthecht, 165
 taírngiri, 159
 taith-, 135, 144
 taithminedar, *note*, 136
 taluande, 149
 tánaíse, 156, *dat. neut.*, tánaísiu, 157, *dat. fem.*, tánaísi, 157
 táncamar, 145
 tar, 142
 taraís, 165
 tarbh, 143
 tarerách, 165
 tarmi, 165
 tar(s), 141, 165
 tarsin-, 165
 teanga, *pl.* teangtha, 149
 tecnate, 149
 teinne, *pl.* teinnte, 148, 149
 ténat, 160
 tenéd, 159
 tenge, 162
 ter-, 144
 tes-, 144
 tesbaíd, *acc.*, tesbaíth, *dat.* *note*, 143
 tess, 146
 tháírbse, *dat.*, 158
 tháirse, tháirsi, 141
 thángas, 145
 thársa, 141
 thársta, 141
 thógbháil, *v.* dothóg, 136
 thoil, *dat.*, 158
 thóisig, *dat.*, 157
 thol, 157, 158
 thorm, 142
 thorraínn, *dat.* thorraíbh, 141
 thréana, *nom. pl.* 157
 thriúin, *gen. masc.*, 157, 158
 thúal, 159
 thúare, 157
 thuisiul, *dat. masc.*, 157

ti-, 135
 tí, 141
 tiar-, 144
 tibradaibh, tibradaibh, 153
 tid-, 135
 tidbarid, 135
 tim-, 144
 timm-, 144
 timmorte, 147, 148, 149
 timnais, M. I., note, 136
 timne, note 135
 tin-, 144
 tind-, 144
 tintúth, 151
 tionnsnadh, gen. tionns
 ganta, 148, 149
 tibradaibh, v. tibradaibh,
 135
 tiprait, M. I., 135
 tipra, tipru, gen. tiprat,
 135
 tír, 159
 tirthat, 150
 tó-, 144
 tobar, 135
 tócbairm, 145
 tóg, 136, 137
 togarmm, dat., 157
 tógbhaídh, 136
 tógbhaim, 145
 toirthech, toirthig, gen.,
 157
 toirse, 159
 tóisich, dat. fem., 157
 tol, 158
 tór-, tor-, 144
 toradh, pl. toirthe, 149
 torbe, 158
 torunn, 141
 tréana, v. thréana, 157
 treasa, 157
 trebair, 158
 tremdirgedar, 165
 tremi, 165
 tresin-, 165
 tresinuil, 160
 trí, 160, 162
 trí, 158
 trian (d-trian), 158
 tricha, nom. pl. trichít,
 158
 trichretim, 160
 triit, 165
 triocha, gen. triochad, nom.
 pl. triochaid, 158
 triotha, 141
 tríš, 165
 tríthe, 141
 trithemel, 160, 165
 trócaire, 145

tú-, 144
 tuaithe, 159
 tuar-, 144
 túati, 149
 tuath, 149
 tuisel, 139
 tur-, 144
 tussu, 160
 ua, v. oua, 141
 uadh, 165
 uadfallichthi, 165
 uailbe, v. uall
 uaim, 142
 uaimm, 142, note 142
 uair, decl., 155
 uaiste, 141
 uaithe, 141
 uall, gen. uailbe, 143
 uasta, 141
 uatha, 141
 uathaib, dat. pl. v. uathath,
 149
 uathate, 149
 uathath, uathad, 139, 149
 ughdar, 141, 145
 uile, 156
 uilib, 165
 uim, 142
 uimb'si, 153
 uimpe, 141, 153
 uirre, uirri, note 137, 141
 um, 140, 142
 umam, 140
 umpa, 141, 145
 urdhaire, v. eardhaire, note
 150

Welsh.

adaned (plur.), 164
 adar, v. atar, 164
 aetinet, 164
 ahanaff, v. ohonaf, note
 142
 atar, v. adar, 164
 bwystuil, 135
 cant-, 144
 e-, 139.
 ebawl, 139, 161
 ed-, 139
 ederyn, v. eteriunn, 164
 enw, note, 142
 eteriunn, v. ederyn, 164
 etncoilhaam, 164
 fcb, 161
 im v. ym, note 143
 laws, 163
 liaus, 163

llawer, 163
 llawn, 163
 lled, v. llyd (llet), 163
 lledanu, 163
 llewni, 163
 lliaws, 163
 lloneit, 163
 lluosydd, 163
 llyd, v. lled, 163
 neuat, neuad, 139,
 nerth, 139
 ohonaf, v. abanaff, note
 142
 orgiat, 139
 ucher, 161
 uith, v. wyth, 139
 ōn, 141
 wyth, v. uith, 139
 y-, 139
 yd-, 139
 ym-, v. im, note 143

Kymrie.

ar-, 139, 164
 at-, 139
 *ep, 161
 er, 164
 et-, 139
 gafar, 162
 gu, 162
 guo, 162
 guor, 162, 163
 gurth, 162
 hep, 161
 kafeal, 162
 laun, 163
 litan, 163
 llydan, 163
 map, 161
 nep, 161
 paup, 161
 penn, 161
 petguar, 161
 pimp, 161
 pisc, v. pysg, 163
 plant, 161
 pren, 161
 prenu, 161
 pysg, v. pisc
 rac-, 164
 yr, 164

Cornish.

ebol, 139
 enef, cneff, note 142
 escop, 138
 gwesper, 116

(h)anow, *note* 142
 hethen, 164
 idne, 164
 leas, 163
len, leun, 163
llewer, 163
 loar, 163
 loure, 163
 luas, 163
 nerth, 139

thym, *note* 143
 war, 164
 y-, 139
 ydnic, 164

Armoric.

arvorek (Breton), 165
 dif, *diff*, *note* 143

e-, 139
 enef, *eneff*, *note* 142.
 ez-, 139
gousper, 161
hanu, *note* 142
leun, 163
 nerz, 139
 war, 164

CORRIGENDA.

[The following have been noticed in preparing the Indices Verborum.]

Page 102 *b*, line 13 from the bottom, *P. or. should be P. or.*

„ 110 *a*, line 2 from the top, there should not be a full point after *cam*.

„ 121, line 8 from the bottom, *for the reference* (I. 177, 180) *read* (pp. 74, 77).

„ 126, line 4 from the bottom, *for noun* *ε, sí, ed*, etc., *read* *nom. ε*, etc.

„ 141, line 9 from the top, *for the reference*, p. 119, *read* p. 127.

„ 158, line 12 from the bottom, *for trochaid* *read* *triochaid*.

„ 158, line 4 from the bottom, *for toll* *read* *tol*.

